

# NATIONAL INSTITUTE OF TECHNOLOGY GOA Farmagudi, Ponda – 403-401, Goa

(An Institution of National Importance under MHRD, Govt. of India, New Delhi)

# Admission To Ph.D. Programmes 2019-20 (January Semester)

Applications are invited for the admission to Ph.D. programmes for the academic year 2019-20 (January 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

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 scheme

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:

- > Full-time / Regular Scheme: Data Mining, Social Media Mining, Blockchain, Security, Spiking Neural Networks
- ➤ Part-time Scheme: Brain Computer Interface, Wireless Sensor Networks, Medical Imaging, Artificial Intelligence, Information Security, Cryptography, Security Analytics, Block Chain Technology, Neural Networks, Soft Computing, Data Science.

#### • Electronics & Communication Engineering:

- ➤ Full-time / Regular Scheme: Analog and Mixed Signal Design, Broad area of Microelectronics, Antenna, Microwave Imaging, Inverse problems, RF and Microwave, Communications, Signal and Image Processing, Signal processing and Wireless Communication, Thermal imaging in Agriculture Technology, RF and Microwave Engineering, Dielectric Resonator Antennas
- ➤ Part-time Scheme: Broad area of Electronics & Communication Engineering

## • Electrical & Electronics Engineering:

- ➤ Full-time / Regular Scheme: Renewable Energy Systems, Power Quality Issues, Power Electronics Applications to Power Systems, Power electronics and drives, Power Electronics, Smart Grids
- ➤ Part-time Scheme: Renewable Energy Systems, Power Quality Issues, Power Electronics Applications to Power Systems, Power electronics and drives, Digital Signal/Image Processing, Wavelets and Filter-Banks, Biometrics, Control Systems, Smart Grids

## • Applied Sciences:

#### > Full-time / Regular Scheme:

*Mathematics:* Convection, Stability, Fluid Mechanics, Bio-medical Imaging, Inverse problems, Numerical Optimization and Neural Networks.

#### **>** Part-time Scheme:

Mathematics: Convection, Stability, Fluid Mechanics, Bio-medical Imaging, Inverse problems, Numerical Optimization and Neural Networks *Physics:* Photonics, Fiber Bragg Grating Sensors, Fiber Optic Sensors, Magnetic Motor

#### Humanities and Social Sciences

## > Full-time / Regular Scheme:

*Economics:* Intellectual Property Rights, Innovation and Economics Development.

English: Comparative Mysticism and Applied Linguistics.

#### **>** Part-time Scheme:

**English:** Comparative Mysticism and Applied Linguistics.

## **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.

<u>NOTE:</u> 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 2019-20 (Tentative)**

Sl.	Semester Fee	First Year		Second	Year	Third Year	
No		I	II	III	IV	V	VI
		Sem	Sem	Sem	Sem	Sem	Sem
1.	Tuition Fee (exempted for	7500	7500	7500	7500	7500	7500
	SC/ST students)						
2.	Other Fee	2000	2000	2000	2000	4000	2000
3.	Group Insurance Coverage	1200	1200	1200	1200	1200	1200
	of Students						
4.	Security Deposit	4000					
	(Refundable)						
5.	Institute Development	4000					
	Contribution-IDC (SC/ST						
	Rs.1000/ - instead of						
	4000/-)						
6.	Alumni Association	1000					
7.	Admission	1000					
	Total (for General, OBC)	20,700	10700	10700	10700	10700	10700
	Total (for SC/ST)	10,200	3200	3200	3200	3200	3200

## 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: <a href="www.nitgoa.ac.in">www.nitgoa.ac.in</a>. 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 favor of "Director NIT Goa" payable at Ponda, Goa. The complete application form and should reach NIT Goa, 403401 on or before

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## **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 2019.
- 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 envel	ope co	ntaining the	application	should	be	super	scribed	as	"Application	for
full-time/part-time	Ph.D.	Programme	(January	semest	er	2019-2	<b>20</b> ) 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 JANUARY SEMESTER 2019-20

No.	Particulars	Date
1.	Advertisement by	06/11/2019
2.	Last date for receipt of duly filled application form	27/11/2019
3.	Tentative date of written test / personal interview at NIT Goa	12/12/2019 & 13/12/2019
4.	Announcement of results	17/12/2019

<u>NOTE</u>: 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: <a href="www.nitgoa.ac.in">www.nitgoa.ac.in</a> 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