



NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY

(An Institute of national importance under MHRD, Govt. of India)

KARAIKAL-609 609

ADMISSION TO Ph.D. PROGRAMMES 2018-2019 (January Session)

National Institute of Technology Puducherry (NITPy) offers research programmes leading to the award of Ph.D. degree. The Ph.D. programme is broad based and involves a minimum course credit requirement and a research thesis (refer Ph.D. rules and regulations). The institute also encourages research in interdisciplinary areas through a system of joint supervision and provides excellent opportunities for such programs. The institute undertakes sponsored research and development projects from government funding agencies such as DST, CPRI, CSIR, MES, etc., as well as private sectors of repute. The degree of Ph.D. is awarded for research work in the areas recognized by the academic departments of the institute. The research work shall be an original work characterized either by the discovery of facts, or by a fresh approach towards the interpretation and application of facts, or development of equipment making a distinct advancement. It shall evince the candidate's capacity for critical examination and sound judgment and shall represent the original contribution to the existing knowledge.

Ph.D. degree programme is offered in various departments as follows:

- i) Civil Engineering
- ii) Computer Science and Engineering
- iii) Electrical and Electronics Engineering
- iv) Electronics and Communication Engineering
- v) Mechanical Engineering
- vi) Mathematics
- vii) Physics
- viii) Chemistry
- ix) English

1. ADMISSION CATEGORIES

1.1 Full time

- a) Regular full time scholars with institute fellowship/JRF. The institute fellowship will be limited and shall be available on merit.

- b) Sponsored candidates being employee of a public sector undertaking, government department, Defense organization, Research and development organization, a private industry/institution (or) educational institutions.
- c) Sponsored from industries under bilateral agreement with the institute.
- d) Self-financed (Indian / Foreign)
 - o **Indian:** This category refers to the persons with experience and good academic record to join the doctoral program in their personal capacity.
 - o **Foreign:** These students are admitted through embassy of the foreign government after the approval from the ministry of external affairs and No Objection Certificate (NOC) from the Ministry of Human Resource Development (or) Department of Education, Government of India (or) admitted under MoU with NIT Puducherry.
- e) Institute Project Staff (Internal): Working on sponsored projects undertaken by the institute can be admitted to Ph.D. programme of NIT Puducherry through institute Ph.D., advertisement.

Note:

- i. The number of institute fellowships will be limited and shall be available on merit.
- ii. In case of full-time sponsored category, the candidate should be sponsored by their parent institution/organization with salary and allowances and are relieved for a period of not less than three years for pursuing Ph.D. Programme.
- iii. In case the sponsorship is withdrawn, the candidate can continue his Ph.D. program provided he/she has passed the comprehensive examination. Under self financed category, he/she may apply for the fellowship from other funding agency.

1.2 Part time

- a) Regular employees of the academic institute may apply through proper channel.
- b) Project Assistant at Government/Private/Public sector R&D organization/labs who cannot award Ph.D. degree and have MoU with NIT Puducherry, may register at NIT Puducherry under the supervision of a supervisor at NIT Puducherry. It is optional that a major part of the work may be completed in their institution. The Choice of a Supervisor at their institution is optional and shall be a matter of mutual understanding between the supervisor at NIT Puducherry and the principal investigator of the project under which the student is project assistant.

- c) Project Staff Employed in other public/private sector organizations or research laboratories having R&D facilities may also register at NIT Puducherry and will normally carry out part or all of one's research work only under supervision of a Supervisor employed in the same organization and a Supervisor at NIT Puducherry.

2. ELIGIBILITY

2.1 Ph.D. in Engineering

(i) Candidates with Master's degree in Engineering/Technology or a Master's degree by Research (M.S. By Research) in Engineering/Technology disciplines with a minimum of 60% aggregate marks (or) CGPA of 6.5/10 in UG and in PG for admission under OC/OBC category and 55% aggregate marks or equivalent CGPA of 6.0 for SC/ST candidates.

(ii) Candidates with Bachelor's degree in Engineering/Technology with valid GATE Score with a minimum of 60% aggregate marks (or) CGPA of 6.5/10 in UG for admission under OC/OBC category and 55% aggregate marks or equivalent CGPA of 6.0 for SC/ST candidates.

2.2 Ph.D. degree in Science & Humanities

Candidates with First class Master's degree in Sciences & Humanities in the relevant discipline with minimum 60% aggregate marks (CGPA 6.5/10) in UG and in PG for OC/OBC category and 55% aggregate marks or equivalent CGPA of 6.0 for SC/ST candidates.

Note:

- i. A Valid NET//UGC/CSIR/SET Score is mandatory for all full time institute MHRD fellowship candidates of Science & Humanities.
- ii. GATE/NET/UGC/CSIR/SET score is desirable for Full-Time and Part-Time Ph.D. admission in Engineering, Science, and Humanities
- iii. Research areas of all the departments are shown in Table I.
- iv. Final year PG students are eligible to apply provided that they should be able to submit the PG provisional degree certificate and the consolidated statement of grades at the time of admission.

TABLE I. RESEARCH AREAS

S.No.	Department	Research Areas
1	Civil Engineering	Structural Engineering, Concrete Structures, FRP Composites, Interface Modeling, Constitutive Modeling of Materials
2	Computer Science and Engineering	Information Security, Wireless Security, Machine Learning, Image Processing, Software Reliability, Data Analytics, Cloud computing,
3	Electrical and Electronics Engineering	Control System, Power system, Power electronics, High Voltage Engineering, Electrical Drives and Control.
4	Electronics and Communication Engineering	Climate Science, Weather prediction models, Machine Learning, internet of things RADAR data analysis and signal processing, 5G Wireless Networks, Internet of Things, Millimeter Wireless LAN, Protocol Modelling & Analysis ,Microwaves, Antennas, Microwave Integrated Circuits, Speech and Image Processing, physical layer, massive MIMO, Deep learning and signal processing, Signal Processing, Pattern Recognition
5	Mechanical Engineering	Design ,Thermal , Manufacturing , Industrial Engineering , Energy
6	Mathematics	Computational Methods, Fluid Dynamics, Numerical Heat and Mass Transfer, Optimization, Bio-mathematics, Fuzzy set theory, Mathematical Theory of Control
7	Chemistry	Nanomaterials, Polymers, Applied Chemistry, Electro-analytical Application, Electro-chemical Energy Studies
8	Physics	Solid State Ionics- Physics of Materials for Energy devices. Tuning of Transport and magnetic properties in Nanoporous materials and ultra thin films
9	English	Linguistics, ELT, ESP and Literary Studies

3. SELECTION PROCEDURE

The shortlisted candidates will be screened by written test and interview by the Departmental Selection Committee. The list of candidates recommended by the Departmental Selection Committee is sent to the Director for approval.

4. ADMISSION PROCEDURE

- a) Selected candidates as approved by the Director will be offered to enroll to the Ph.D. programme by remitting the prescribed fees. The candidate should also remit fees every semester as prescribed by the institute failing which registration will be cancelled.
- b) Ordinarily, a candidate is not eligible for re-registration for Ph.D. after cancellation of his/her earlier registration for any reason. However, depending on the merits and considering any special circumstance of the individual case, a candidate may be considered for re-registration after Director's approval.

5. PAYMENT OF FEES

A) One Time Fees at the time of Admission

Admission	:	Rs.	200.00
Grade Card	:	Rs.	150.00
Medical Examination	:	Rs.	100.00
Alumni Life Membership	:	Rs.	500.00
Seminar/Thesis	:	Rs.	950.00
Institute Deposit (Refundable)	:	Rs.	3,000.00
Library Deposit (Refundable)	:	Rs.	500.00
Total	:	Rs.	5,400.00

B) Semester Fees

Tuition	:	Rs.	7,500.00
Computer	:	Rs.	1,000.00
Internet	:	Rs.	300.00
Library	:	Rs.	1,000.00
Registration and Enrollment	:	Rs.	200.00
Association and Cultural	:	Rs.	1,000.00
Student Aid fee	:	Rs.	200.00
Sports Centre	:	Rs.	100.00
Medical and Insurance	:	Rs.	200.00
Total	:	Rs.	11,500.00

C) Hostel Fees

i) Establishment	:	Rs. 4,000.00
ii) Rent	:	Rs. 6,000.00
iii) Mess	:	Rs. 12,500.00
iv) One Time Caution Deposit (Refundable)	:	Rs. 4,000.00

Total	:	Rs. 26,500.00

6. FINANCIAL ASSISTANCE

Limited number of research fellowships is available to full time research scholars who are not receiving any financial support/scholarship from State/Central Governments (or) other agencies. They are required to assist the Department in the academic work for at least 8 hours per week as per guidelines issued by the Ministry of Human Resources and Development, Govt. of India, in addition to satisfying other conditions for the award of the fellowship. The present fellowship emoluments are as follows:

Department / Discipline	Stipend
Ph.D. in Engineering	Rs.28,000/-
Ph.D. in Sciences/Humanities	Rs.25,000/-

However, those who are awarded UGC/CSIR/NBHM/NET/JEST may utilize the Doctoral Fellowships once admitted to the Ph.D. programme.

Reservation Chart for Regular full time scholars with institute fellowship:

Department	Category				
	GEN	OBC	SC	ST	PH
Computer Science and Engineering	01	-	01	01	-
Electrical and Electronics Engineering	01	-	01	-	-
Electronics and Communication Engineering	01	01	-	01	-
Mechanical Engineering	01		01		
Mathematics	01	01			
Chemistry		01			
Physics		01			

7. DURATION OF THE PROGRAMME

- a) A full time candidate can submit the synopsis and thesis only after a minimum period of study of 21 and 24 months respectively from the date of registration.
- b) A part time candidate can submit the synopsis and thesis only after a minimum period of study of 33 and 36 months respectively from the date of registration.
- c) The maximum period to complete the programme is 5 years for full time candidates and 7 years for part time.

8. RESIDENTIAL REQUIREMENT

- a) Full time candidates may leave the Institute for taking up jobs, only after the submission of synopsis of the thesis.
- b) The minimum residential requirement for Ph.D., scholar under external registration and research scholars working on a part time basis not employed in the institute is one semester.
- c) All part time scholars have to spend minimum 30 contact days per semester till thesis submission in the institute with the supervisor. Such scholars have to obtain permission to this effect from their parent organization.

9. HOW TO APPLY?

Candidates applying for Ph.D. programme can apply through the downloaded application form available at www.nitpy.ac.in. A non-refundable application fee of Rs. 1000/- (Rs.500/- for SC/ST/PH) has to be paid through SBI Collect, which is to mentioned in the application form. The filled up application form along with self-attested photocopies of marksheets, degree certificates, community certificates, and the necessary enclosures should reach '**The Associate Dean (Academic), National Institute of Technology Puducherry, Thiruvettakudy, Karaikal –609 609** on or before **28-12-2018**.

10. Important Dates:

Last date for submission of application form	Publication of Shortlisted candidates (Institute Website)	Written test and Interview	Publication of selected list of candidates (Institute Website)	Reporting date for Admission
28/12/2018	05/01/2019	12 th Jan 2019 (Reporting time at 8.30 am.)	16/01/2019	21/01/2019

For further queries, contact:

Associate Dean(Academic),
National Institute of Technology, Puducherry,
Thiruvettakudy, Karaikal – 609 609

LAST DATE FOR SUBMITTING THE APPLICATION IS 28-12-2018

No Objection/Sponsorship Certificate from the Organization

(To be submitted in the Official Letter Head by the Ph.D. Candidates)

The applicant working as
..... in since
..... is herewith recommended and forwarded for admission under External
registration Scheme of the National Institute of Technology Puducherry for part time Ph.D.
Programme in the Department of

Certified that:

1. This organization has adequate facilities for carrying out the research indicated by the applicant and if he/she is selected, these will be made available to him/her during regular working hours till the completion of the programme.
2. The applicant will be deputed/given leave for duration of his/her residence period at NIT Puducherry.
3. Facilities will be made available to the Supervisor (External Guide) to supervise the work of the applicant and to attend the meetings at NIT Puducherry, when necessary.
4. Till the completion of his/her research programme, the applicant will not ordinarily be transferred to another unit or place which may impede his/her work under the scheme. If such a transfer is necessary, NIT Puducherry will be informed within a month of such transfer.
5. Till the completion of his/her research programme, the applicant will adhere to the NIT Puducherry Ph.D. rules and regulations.
6. No part of the work carried out in fulfillment of the Research programme will be utilized commercially or for applying for a Patent without the approval of National Institute of Technology Puducherry.

Date:

Signature of the Sponsoring Authority

Name and Designation

Seal of the organization/ Institution

Postal address of the Organization/ Institution:

Certificate of External guide/ Research coordinator

(To be submitted by the Ph.D. External Registration Candidates)

This is to state that in the event of Mr./Ms. of this organization being selected for part time Ph.D. programme in the Department of under the External Registration Scheme of NIT Puducherry, I agree to be his/her External Guide/Research coordinator and shall extend all possible guidance and following facilities to enable him/her to carry out his/her research programme towards the submission of thesis.

Particulars of Prospective External Guide / Research Coordinator:

- (1) Name of proposed External Guide/Research coordinator (In Block letters):
- (2) Designation of External Guide/Research coordinator:
- (3) Academic qualifications of External Guide/Research coordinator:
- (4) Membership of Professional Societies of External Guide/Research coordinator:

Research Facilities Available: (To be filled here)

Date:

**Signature of the External Guide/Research Coordinator
Name and Designation**

Seal of the organization

No Objection Certificate from the Organization

(To be submitted in the Official Letter Head by the on-campus Ph.D. Candidates)

The applicant working as
..... in since
..... is herewith recommended and forwarded for admission under Internal
registration / Institute Project Staff Scheme of the National Institute of Technology
Puducherry for part time Ph.D. Programme in the Department of
.....

Certified that:

1. We note that facilities of the NIT Puducherry will be made available to him/ her for carrying out the research work under the supervision of a guide and he/she has to pay full fees every semester for the use of laboratory, library and other facilities of the Institute.
2. This organization facility will also be made available to him/her in the case of selection.
3. The applicant will be deputed/given leave for duration of his/her residence period at NIT Puducherry.
4. Till the completion of his/her research programme, the applicant will not ordinarily be transferred to another unit or place which may impede his/her work under the scheme. If such a transfer is necessary, NIT Puducherry will be informed within a month of such transfer.
5. No part of the work carried out fulfillment of the Research programme will be utilized commercially or for applying for a Patent without the approval of **National Institute of Technology Puducherry**.
6. Till the completion of his/her research programme, the applicant will adhere to the NIT Puducherry Ph.D. rules and regulations.

Date:

Signature of the Sponsoring Authority

Name and Designation

Seal of the organization/ Institution

Postal address of the Organization/ Institution: