



**राष्ट्रीय प्रौद्योगिकी संस्थान नागालैंड**  
**NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND**  
**Chumukedima, Dimapur-797103**  
**Nagaland**

**Ref.No. NIT-N/ADVT/Research/0002/2019 dated 22-10-2019**

**A. Ph.D. PROGRAMME**

Applications are invited from qualified candidates for admission to Ph.D. programme (Full Time / Part Time) in the disciplines of EEE, ECE, CSE, EIE, ME, Mathematics, Physics, Chemistry and English. The Departments and areas in which these Programme will be offered are:

<b>SL. NO.</b>	<b>DEPARTMENT</b>	<b>SPECIALIZATION/ AREA OF RESEARCH</b>
1.	Computer Science and Engineering	Machine Learning, Deep Learning, Data Analytic, Bioinformatics, IoT, Image Processing, Information Security, Wireless Communications, Online Social Networks Analysis
2.	Electrical and Electronics Engineering	Renewable Energy Systems, Forecasting / Predictive analytics in Renewable Energy Systems, Machine Learning, Deep Learning Power Systems, Power System operation control and Stability, Relay Coordination, Deregulated Power System, Application of IoT and Machine Learning for Smart Grid, Service Restoration and Distribution Network Reconfiguration, Grid Integrated Renewable Energy IoT in smart grid, Demand side management strategies in smart grid, PEV/PHEV in smart distribution grid, Applications of big data analytics in power systems Control System, Optimization, Estimation, Control design for power system, Control design for Microgrid, PV system and Wind energy system, Control design for Power Converters and Filters, Biomedical instrumentation and Control, Machine Learning and Deep Learning in control perceptive, Control development for robotic vehicles Internet of Things, Data Analytics, Machinery Diagnostics, Wind Power Generation, Smart Grids, Industrial Automation and Control, Robotics
3.	Electronics and Communication Engineering	Semiconductor devices, sensors, optoelectronic devices, Memory devices. Speech processing, Speaker recognition and Digital image processing
4.	Electronics and Instrumentation Engineering	Wireless Communication, Control of Smart Structures, WSN, Embedded Systems, MEMS and IOT.
5.	Mechanical Engineering	Robotics, Manufacturing, Wear and Tribology, Metal Forming, Thermal Engineering, computer assisted manufacturing
6.	Science (Physics, Chemistry and Mathematics) and Humanities	Nanomaterials, Nanomagnetism, Thin Film Technology, Material science, Physical Chemistry, Environmental Chemistry, Bioinorganic and Biophysical Chemistry, Applied Mathematics, Operation Research, Theoretical Mathematics, Algebra and English ( Poetry and Fiction)

## **Eligibility Criteria for PhD Programme in Engineering**

Master's degree in Engineering / Technology with Bachelor's degree in Engineering / Technology/ MS by Research in Engineering / 5 year integrated Masters/ Dual Degree in Engg or BS+MS (5-year integrated course) from CFTI in a relevant area specified above with a minimum First class and CGPA/CPI of 6.5 or above (on scale of 10) or 60 % marks (55% marks for SC/ST candidates).

Or

M.Sc. (with valid GATE score) from any Recognized University / Institute with a minimum First class and CGPA/CPI of 6.5 or above (on scale of 10) or 60 % marks (55% marks for SC/ST candidates)

## **Eligibility Criteria for PhD Programme in Science and Humanities**

Master's degree in Science/Humanities/ME/M.Tech or MS by Research in Engineering/ BS+MS (5-year integrated course) from CFTI or equivalent degree, with minimum First class and CGPA/CPI of 6.5 or above (on scale of 10) or 60 % marks (55% marks for SC/ST candidates)

## **B. INTEGRATED Ph.D. PROGRAMME**

Applications are also invited from qualified candidates for admission to Integrated Ph.D. Programme in the disciplines of EEE, EIE, ECE and CSE for the above mentioned specialization/area.

### **Eligibility Criteria for Integrated Ph.D. Programme:**

Bachelor's degree in Engineering / Technology or equivalent in the disciplines of Electrical and Electronics Engineering, Electronics and Communication Engineering and Computer Science and Engineering with a minimum CGPA of 8.0 or above (on scale of 10) or 75 percent of marks and a valid GATE score. If the qualifying B.E. / B.Tech. degree is from an IIT / NIT or any Centrally Funded Technical Institute (CFTI) with CGPA 8.5 or 80 percent of marks, then the valid GATE score requirement shall be exempted but scholarship will be provided to only to candidates with valid GATE score.

### **OTHER GUIDELINES:**

- Candidates applying for Ph.D. Programme/Integrated Ph.D. Programme shall apply through the downloaded application form from the institute website.
- If anyone requires to apply for more than one specialization, he / she should apply separately for each specialization.
- Candidates can attach their academic profile, if required. Academic profile includes the following information:
  1. Details of publications / conference papers
  2. Awards, patents, prizes etc.,
  3. Other activities
- If the candidate is applying for full-time Ph.D. and he / she is employed, relieving certificate from the employer should be produced at the time of admission.
- Preference will be given to those candidates who are having valid GATE / NET score.

- The Institute will not be responsible for any postal delays or loss of the application during transit.
- The date and time of written test/interview for the shortlisted candidates will be uploaded in the institute website on 26<sup>th</sup> November 2019. No separate intimation will be given to the individual applicant.

The duly filled in application form along with enclosures and a non-refundable application fee of Rs. 1,000/- (Rs.500/- for SC / ST candidates) by means of a Demand Draft drawn in favour of **IRG, NIT Nagaland**, payable at Chumukedima, Dimapur should reach the office of the Director, National Institute of Technology Nagaland, Chumukedima, Dimapur – 797 103 on or before 22-11-2019.

The envelope containing the application must be super-scribed as “**Application for the Ph.D. Programme in the Department of.....**  
.....”

The Rules and Regulations of Ph.D. Programme and Integrated Ph.D. Programme shall be downloaded from the Web address:  
<http://nitnagaland.ac.in/index.php/academics/rules-and-regulations>

**Note:**

- **Only full-time candidates with GATE score/UGC NET including lectureship (Assistant Professorship) in order of merit will be considered for institute scholarship subject to the availability of funds from MHRD. Others are not eligible for scholarships.**
- **Last date for submission of duly filled application is 22<sup>nd</sup> November,2019 by 4.00 p.m.**

**DIRECTOR**