NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL



राष्ट्रीय प्रौद्योगिकी संस्थान कर्नाटक, सुरत्कल P.O SRINIVASNAGAR, MANGALORE - 575025

EC Call Letter List

PhD, 2025 - 26

The following applicants have been selected for written exam and/or interview for the department for the department of Electronics and Communication Engineering for PhD Programme. The applicants are requested to go through additional information provided in their Call letters.

#	Name	Reference Number	Branch/Specialisation
1	BALASUBRAMANIAM P	PH2025EC0042	Electronics and Communication Engineering
2	KARVANNAN R	PH2025EC0043	Electronics and Communication Engineering
3	Deepesh	PH2025EC0049	Electronics and Communication Engineering
4	SHASHIDHAR S NEELAKANTHMATH	PH2025EC0046	Electronics and Communication Engineering
5	CHINCHU GRACE LUKOSE	PH2025EC0045	Electronics and Communication Engineering
6	MUNNANGI KOTI REDDY	PH2025EC0048	Electronics and Communication Engineering
7	MAHENDER EEREDDY	PH2025EC0056	Electronics and Communication Engineering
8	Mahesh Venkatesh Shet	PH2025EC0052	Electronics and Communication Engineering
9	Vishweshkumar Aithal	PH2025EC0050	Electronics and Communication Engineering
			Page 1 of 2



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EC Call Letter List

PhD, 2025 - 26

10 #	A N SAI CHAKRAVARTHY Name	Reference 0051 Number	Electronics and Communication Brainch Specialisation
11	BELLAM ASHOK	PH2025EC0053	Electronics and Communication Engineering
12	GOPIKA GOPINATH E	PH2025EC0055	Electronics and Communication Engineering
13	PHANIDAPU ANNAPURNA	PH2025EC0054	Electronics and Communication Engineering
14	Tony C Thomas	PH2025EC0057	Electronics and Communication Engineering

Head Of Department Electronics and Communication Engineering

Dean Academics

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA SURATHKAL

P.O. SRINIVASNAGAR, MANGALURU-575 025

No. PhD/2025-26/E6 Date: 21-11-2025

Admit Card

Sub: Ph.D. Programme – Written Aptitude Test / Interview for the year 2025-26 (Dec. Session)

With reference to your application for admission to Ph.D. Programme in the department of Electronics and Communication Engineering, you are requested to appear for the Written test/Interview at NITK Surathkal. You should produce all the original records such as Date of Birth Certificate, GATE Score Card, Degree Certificate and Marks Cards of all semesters (UG and PG programmes), if result of the final year exam is awaited then provide a certificate from the head of your institution which states that you are the final year student of (branch) appearing / appeared for the final year / semester examination during academic year 2024-25 and results are awaited, SC/ST/OBC/EWS certificate (if applicable as per proforma), OBC / EWS certificate should be obtained from competent authority as specified in the NITK website and must be dated on or after April 1, 2025, Person with disability certificate (if applicable), Sponsorship letter (if applicable), Conduct Certificate and valid photo identity card. Please keep a self-attested photocopy of all these certificates readily available at the time of interview.

Department	Department of Electronics and Communication Engineering		
Place of Reporting	Department of Electronics and Communication Engineering,		
	NITK Surathkal		
Document verification	December 08, 2025, 9:00AM onwards		
Written Test Date and Time	December 08, 2025, 2:00 PM at ECE Department		
Announcement of shortlisted	December 08, 2025, 4:00 PM		
candidates for interview			
Interview Date and Time	December 09, 2025, 9:00AM Onwards, Meeting room, ECE		
	Department		

NOTE:

- 1. Candidates should be prepared to appear for the written Aptitude Test before the interview. Fee Structure for PhD programme and Course syllabus for aptitude test are provided on Institute's website, i.e. www.nitk.ac.in. A copy of the syllabus for the aptitude test has been appended to this call letter.
- 2. Full-time/External Registrants sponsored from Industry or other organizations including Educational Institutions, should have been serving in the sponsoring organisation for a period of at least 2 years after qualifying degree and have to produce a letter from their employer stating that the candidate is deputed for Research Programme (Full time /External Registrant) in the Institute on **full salary** during the study period. The employer should indicate that the candidate will not be withdrawn midway before the completion of the course. (Sponsorship letter should be in the format provided in the Application Form).
- 3. Your candidature for this test is provisional & is subject to your fulfilling the educational qualifications & other criteria prescribed for the programme as mentioned in Information Brochure, failing which your candidature can be summarily rejected after verification/scrutiny at a later stage.
- 4 Please keep the Admit Card ready during the test and interview. You are responsible for safe custody of the Admit Card and in the event of any other person using this Admit Card, the responsibility lies on you to prove that you have not used the service of an impersonator.
- 5 Please note that no expenses shall be payable for appearing in the written test/Interview.
- The Selected candidates are required to pay fees and get admitted during the period from 22nd to 26th December, 2025 and physical reporting at the Institute on or before December 30, 2025.
- 7 Candidates must give 10-minute presentations of their research plans (not more than 6 slides). Email the presentation in PDF format to ecnitk@gmail.com on or before 7th December 2025

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA SURATHKAL

P.O. SRINIVASNAGAR, MANGALURU-575 025 Telephone: 0824-2473046, Website: www.ece.nitk.ac.in

Date: 21-11-2025

Syllabus for PhD Programme Aptitude Test- December 2025

Date and time for:

• **Document verification:** December 08, 2025, 9:00 AM onwards

• Written Test: December 08, 2025, 2:00PM to 3:00PM.

• **Interview**: December 09, 2025, 9:00 AM onwards

Question Paper format: 20 MCQ types questions in 60 minutes, with distribution as below:

The Test paper has 2 Parts, Part-1 is compulsory, and Part-2 is stream specific modules. The candidate is supposed to attempt Module A or Module B or Module C from Part-2 depending on the candidature for a particular research domain. Part-1 has 10 multiple choice type questions, whereas, each module of Part-2 has 10 multiple choice type questions. Each correct answer carries 1 mark and wrong answer carries -0.25 marks.

Note: Total duration of Exam is one hour. Calculator is permitted.

Part-1:

Linear Algebra, Calculus, Differential and Difference equations. Numerical methods, Transforms, Linear circuits and networks, Electronic components and Devices, Analog Electronics, Digital Electronics, Signals and Systems, Linear and Digital Control Theory.

Part-2:

Module-A (Communication domain)

Electromagnetic Waves, Probability and Random Processes, Communication Theory, Communication Circuits, Transmission Lines, Wave Guides, Antennas, Microwave devices and Circuits, Data Communications, Communication Networks, Satellite Communication, Optical Communication, Fundamentals of Signal Processing.

Module-B (Signal Processing and Machine Learning domain)

SP Fundamentals: Time domain analysis of discrete-time systems - Basic discrete time signals, discrete-time Fourier Series, Z Transform - definition and properties, Discrete-time Fourier Series and its properties, Properties and applications of DTFT. Relationship between time, Z- and frequency domains, DFT fundamentals and Properties of DFT, FIR and IIR filters. Data Structure Fundamentals: Algorithm analysis, Asymptotic notations. Divide and Conquer algorithms, Analysis of divide and conquer algorithms, master method, examples - merge sort, quick sort, binary search, Data structures, Linked list, stacks and queues.

Module-C (VLSI Design domain)

Linear and Digital ICs, Digital System Design, VLSI Technology, CMOS VLSI, Mixed Signal Design, HDL, Data converters, Microprocessors, Computer Architecture and organization, Logic Synthesis, DSP Architectures, Embedded Systems.

Weightage of different academic components for evaluation (As per the information brochure):

Ph.D.

Entrance Test		
	Publication	5%
Tachminal Interniors	Experience (Research/Academic (M.Tech ME) /Industries)	5%
Technical Interview (60%)	Technical Presentation	10%
(-2)	Q&A On Technical Presentation (Research Aptitude/ Technical knowledge/Subject knowledge)	40%

Candidates must give 10-minute presentations of their research plans (not more than 6 slides). Email the presentation in PDF format to ecnitk@gmail.com on or before 7th December 2025