

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

(An Institute of National Importance, Established under NITSER Act, Government of India)
Mangaluru - 575 025, Karnataka, India

No.: 5210-Advt./Faculty-NITK-Estt./2024/B1 Date: 27th July, 2024

RECRUITMENT FOR FACULTY POSITIONS

National Institute of Technology Karnataka (NITK), Surathkal located in Mangalore is an Institute of National Importance ranking among India's top 12 engineering institutes (NIRF 2023). Mangalore is the headquarters of Dakshina Kannada district, well connected by road, rail, air and sea to other parts of the country and world. It is an important centre of education, business, trade and tourism.

Spread over nearly 300 acres with verdant greenery and its own beach, NITK campus provides an inspiring and peaceful ambience to its residents. The Institute attracts the brightest students from all states of India as well as overseas, and currently houses over 6500 students. Since its inception in 1960 (as Karnataka Regional Engineering College), NITK has produced over 35,000 alumni who have immensely contributed in different fields, including high-value business ventures in India, the USA and other countries.

More than 270 well-qualified faculty members hailing from different parts of the country have made NITK their home. The campus has all essential amenities such as schools, a healthcare centre, cooperative shops, banks, a post office, a food court and a staff club. The NH-66 passing through the campus provides quick connect to Mangalore City and the airport. The unique Central Research facility housing sophisticated instruments enables cutting-edge research. The in-house S&T Park provides an exciting opportunity for incubating start-up companies.

NITK seeks to recruit faculty members among Indian nationals and Overseas Citizen of India (OCI) cardholders from all over the world, possessing excellent and relevant academic credentials. They are expected to contribute to the Institute's growth in terms of world-class teaching, research, innovation and outreach activities. New incumbents will leverage the well-established facilities, processes, reputation, and partners of the Institute to excel in their area of interest, explore new interdisciplinary fields, establish meaningful collaborations, and create techno-socio-economic impact.

NITK has started a fresh round of recruitment to fill 100 faculty positions spread across 14 departments.

Opening date of the online application portal : 27.07.2024

Last date for submission of online application : 17.08.2024 (Till 5:00 p.m.)

Last date for submission of hardcopy of the application : 23.08.2024 (Till 5:00 p.m.)

1. DEPARTMENTS AND SPECIALIZATIONS

SI. No.	Department	Essential Qualification	Area of specialization
1.	Chemical Engineering (CH)	UG Degree: B.E./B.Tech in relevant discipline; PG Degree: M.E/M.Tech or equivalent in relevant discipline; Ph.D. in the desired specialization	Biotechnology; Biochemical Engineering; AI & ML in Chemical, Environmental and Biotechnology applications; Energy & Environmental Engineering; Process Intensification; Catalysis and Reaction Engineering; Modelling and Simulation.
2.	Chemistry (CY)	UG Degree: B.Sc. or equivalent with Chemistry as one of the major subjects; PG Degree: M.Sc.Chemistry; Ph.D. in the desired specialization	Physical Chemistry; Inorganic Chemistry
3.	Civil Engineering (CV)	UG degree: B.Sc or equivalent in Geology/ Applied Geology/ Earth Sciences; or B. Tech in Civil Engineering. PG Degree: M.Sc/ M.Tech or equivalent in Geology/ Applied Geology/ Earth Sciences; or M.E./M.Tech or equivalent in Transportation Engineering, Construction Management / Construction Technology and Management / Construction Engineering and Management / Construction Engineering and Infrastructure Management; PhD in the desired specialization.	Geology / Earth Sciences; Transportation Engineering; Structural Engineering; Construction Engineering/ Technology/ Management/ Infrastructure Management; AI & ML applications to Civil Engineering.
4.	Computer Science & Engineering (CS)	UG degree: B.E./B.Tech in CSE/IT/ISE; PG degree: M.E./M.Tech or equivalent in CSE/IT/ISE and allied areas; Ph.D in the desired specialization	Theoretical Computer Science; Autonomous Systems; Blockchain Technology; Compilers & Programming Languages; Computer Architecture & Parallelization; Computer vision; Cyber Security; Cyber-physical Systems; Data Analytics & DBMS; Distributed/ Cloud/ Edge/ Fog computing; Formal Verification; Image Processing; Internet of Things; AI; ML; Operating Systems; Quantum computing; Computer Networks; Software Engineering; Speech & Audio Processing.
5.	Electrical & Electronics Engineering (EE)	UG degree: B.E./B.Tech in Electrical Engineering / Electrical & Electronics Engineering or equivalent; PG degree: M.E/M.Tech or equivalent in Electrical Engineering/ Electrical & Electronics Engineering or equivalent; Ph.D in desired specialization.	Power and Energy Systems; Control Systems; New & Renewable Energy Systems; Insulation & High Voltage Engineering; Power Electronics & Electric Drives; Application of Signal Processing; AI/ML Algorithms in the Electrical Engineering domain.

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6.	Electronics & Communication Engineering (EC)	UG degree: B.E./B.Tech in Electronics & Communication Engineering or equivalent; PG degree: M.E/M.Tech or equivalent in VLSI, Signal Processing, Communication Engineering or equivalent; Ph.D. in desired specialization	Analog, Digital, RF & Mixed signal; VLSI; Processor Architecture; Embedded Systems; Biomedical Circuits & Systems; Reconfigurable & Multi-core architectures and design; Microwave & Millimetre wave communication; Wireless Communication & Networks; IoT & Sensor Network Architectures for 5G/6G networks; Optical Networks; Meta Surfaces & Metamaterials; Signal Processing- Audio, Speech, Image, Biomedical & Natural Language Processing; Hardware Implementation of Signal Processing & ML Algorithms.
7.	Information Technology (IT)	UG degree: B.E./B.Tech in CS/IT/ISE and allied branches; PG degree: M.E/M.Tech or equivalent in CS/IT/ISE and allied branches; Ph.D. in the desired specialization	Algorithms; Parallel & Distributed Computing; Human-Computer Interaction; Web Technologies; Database System; Software Engineering; Data Analytics; Theoretical Computer Science; Data Science; AI, ML & DL; Operating Systems; Computer Networks; Security; Cyber-Physical Systems; Computer Vision; Soft Computing; Game Theory and Optimization Techniques.
8.	Mathematical & Computation al Sciences (MA)	PG Degree: MS/MSc in Mathematics/Statistics/ Data Science/ Information Security or equivalent OR ME/M.Tech or equivalent in CS/IT/ISE/AI/ML/ Bioinformatics or equivalent; 4-Year Graduation Program with direct Ph.D. in any of the above disciplines	All basic and advanced areas of Mathematics, Statistics, Data Science and Computer Science, including but not limited to: Algebra, Algebraic Topology, Linear Algebra, Number Theory, Complex Analysis, Differential Equations, Functional Analysis, Financial Mathematics, Big Data Analytics, Computational Geometry, Numerical Analysis, Bioinformatics, Computational Biology, Block-chain technology, Cloud/Fog/ distributed computing, Computer Vision, Cryptography, Deep Learning, High Performance Computing, Operations Research, Signal/Video/Image Processing, Statistics, Theoretical Computer Science.
9.	Mechanical Engineering (ME)	UG Degree: B.E./B.Tech in Mechanical Engineering; PG Degree: M.E/M.Tech or equivalent in Mechanical Engineering; Ph.D. in the desired specialization	Optics based Flow Visualization; Experimental Microfluidics; Metrology; Additive & Digital Manufacturing; Al & IoT in Smart Manufacturing; Micro/Nano Manufacturing; Bio & Meta materials; Non-linear Dynamics; Acoustics; Aerospace/ Aerostructures; Design for Sustainability; Multi-scale Modelling of Materials; Non-destructive Evaluation; Sensors & Actuators; Control Engineering; Microcontrollers; Electric Vehicles; Automotive Electronics; Bio-Medical Engineering; Robotics; Industrial & Human Engineering.
10.	Metallurgical & Materials Engineering (MT)	UG degree: B.E./B.Tech in Metallurgy/ Materials Science/ Engg. or equivalent; PG degree: M.E/M.Tech or equivalent in Metallurgy/ Materials Science/ Engg. or equivalent; Ph.D. in the desired specialization	Integrated Computational Materials Engineering; Computational Materials Science; Modelling and Simulation of Materials Processes; Advanced Metallurgical Thermodynamics and Kinetics; Development and Characterization of Advanced Materials.

11.	Mining Engineering (MI)	U.G Degree: B.E./B.Tech in Mining/ Civil/ Mechanical/ Metallurgical/ Electrical/ Electronics Engineering. P.G Degree: M.E/M.Tech or equivalent in Mining or related fields; Ph.D. in the desired specialization	Ergonomics, Biomechanics and Safety in Mining; Accident Investigation, Reconstruction, Simulation & Prevention; Risk Assessment & Mitigation; Disaster Resilient Infrastructure and Health Monitoring; IoT, AI & ML Applications such as Epidemiological Studies; Mine Waste Utilization; Environmental Management; Green Energy for Mining Operations; Geoinformatics for Monitoring & Scheduling; Rock Mechanics & Excavation; Blast & Ground Vibration Modelling; Mineralogical Characterization; Design of Mineral Processing Systems; Utilizing Low-Grade Ores; Dry Beneficiation; Iron Ore Palletisation, Coal Sintering & Dry Processing; Clean Coal Technology.
12.	Physics (PH)	UG Degree: Bachelors in Science/ Technology with Physics as a core subject; PG Degree: Physics; Ph.D. in the desired specialization	Condensed Matter Physics (Theory, Computation and Experiment); High-energy Physics and Cosmology; Bio-Physics and Soft condensed matter physics; Quantum information and computation.
13.	Humanities, Social Sciences & Management (SM)	UG Degree: Bachelors in Arts/ Science/Engg./Technology/ Commerce/Law/Medicine; PG Degree: MBA/ Masters in the desired specialization; Ph.D. in the desired specialization	Ethics/Philosophy; English & Comparative Literature; Linguistics; ELT; Cultural Studies; Sociology; Psychology; History; Environmental, Social & Governance (ESG); Indian Knowledge Systems; Public Economics; Development Economics; Macro Economics; Monetary Economics; Econometrics; Information Systems and Analytics; Operations/ Project Management; Risk Management; Innovation & Entrepreneurship; Lean Startup; IPR; Finance & Accounting; Leadership & Team-building; Social Entrepreneurship.
14.	Water Resources & Ocean Engineering (WO)	UG Degree: B.E./B.Tech in Civil Engineering; PG Degree: M.E/M.Tech or equivalent in relevant specialization; Ph.D. in the desired specialization	Geoinformatics; Remote Sensing & Geographical Information System; Marine structures; Offshore structures; Ocean Engineering; Ocean Structures;

2. VACANCY MATRIX

The vacancy matrix for faculty positions at National Institute of Technology Karnataka, Surathkal is as follows:

a) Assistant Professor - Grade II and I (Pay level 10, 11 and 12): total number of tentative vacancies available: 96

i) Regular vacancies: 87

Category	Departments	No. of Vacancies
General	CH, CS, EC, IT, MA, ME, MI, PH, SM, WO	37
SC	CS, CV, EE, EC, IT, MA, ME, SM	13
ST	CS, CV, EC, IT, MA	06
OBC	CS, CV, EE, EC, IT, MA, ME, SM	23
EWS	CS, CV, EC, MA, SM	08

ii) Backlog vacancies: 9

Category	Departments	No. of Vacancies
SC	CS	01
ST	EC, SM, MA, ME, PH, WO	06
OBC	CS, EE	02

b) Associate Professor's level - total number of tentative vacancies available: 2

Category	Departments	No. of Vacancies
General	CS, MA	2

c) Professor's level - total number of tentative vacancies available: 2

Category	Departments	No. of Vacancies
General	CS, IT	2

Note: PwD Reservation is as per Govt. of India norms.

3. APPLICATION PROCEDURE

- 1. The application form has to be submitted both in online and printed modes.
- 2. To submit the application online, click on the recruitment link posted on the NITK website (www.nitk.ac.in), register in the recruitment portal and fill up the online application form. All relevant documents have to be uploaded to the recruitment portal along with the application form. A PDF copy of the application form will be generated after submission of the online form.
- 3. Candidates applying for more than one Department and/or position/pay level are required to submit separate application forms (both online and printed). The same login can be used for this purpose.
- 4. Candidates having Ph.D. Degree directly after the undergraduate degree and candidates having a Ph.D. degree with integrated master's degree from reputed Institutions/Universities will also be considered if other norms are fulfilled.
- 5. Online application must be submitted on or before Saturday, 17th August, 2024, 5:00 p.m. IST
- 7. Printed application must reach NITK, Surathkal on or before Friday, 23rd August, 2024, 5.00 p.m. IST.
- 8. Processing Fee (non-refundable) for each Application:
 - ₹2,500/- (Rupees Two Thousand Five Hundred Only) for General & OBC candidates.
 - No fee shall be charged for SC, ST & PwD candidates.
 - The processing fee can be paid online from a bank, or through NEFT/RTGS.

Beneficiary Name: NITK, Surathkal

Bank Name: STATE BANK OF INDIA

Branch Name: NITK Surathkal IFSC: SBIN0002273 Account No.: 37772503911

- <u>Important</u>: Mention the application number and candidate name in the NEFT payment form. Mention the UTR in the application form.
- 9. The address for sending the printed hardcopy of the application and the relevant documents:

The Registrar,

National Institute of Technology Karnataka (NITK), Surathkal, Mangaluru - 575 025, Karnataka, India.

4. INFORMATION AND INSTRUCTIONS

Candidates are advised to carefully read all the instructions given below, before filling up the online application.

- 1. Applications are invited from qualified Indian Nationals and Overseas Citizen of India (OCI) cardholders for faculty positions at NITK in various departments.
- 2. As an Institute of National Importance, NITK strives to have a workforce which reflects an all-India character and hence candidates from all over the country are encouraged to apply.
- 3. NITK strives to have a workforce that also reflects gender balance and hence women candidates are especially encouraged to apply.
- 4. Reservation for SC/ ST/ OBC/ EWS/ PwD is as per Govt. of India norms. Persons with Disability (PwD) are required to provide the medical certificate in the prescribed format issued by the competent authorities for the purpose of employment as per Govt. of India norms along with their application. Transgender candidates are required to provide a certificate/ identity proof issued by the competent authority.
- 5. Besides the basic pay in the applicable pay level of the respective positions, admissible allowances like DA, TA, LTC, Children Education Allowance, etc., are payable in accordance with the Central Government/ Institute Rules in force from time to time. Fresh appointees will be covered under the New Pension Scheme (NPS-2004) as per Government of India rules. Medical facilities for the faculty and their dependents are provided as per GOI norms. Exceptionally meritorious and experienced candidates may be granted higher pay on the recommendation of the Selection Committee.

- 6. For candidates joining the institute, a Professional Development Allowance (PDA) of ₹ 3 lakhs for every block period of 3 years (Rupees one lakh per year) is made available to every member of the faculty on a reimbursable basis to meet the expenses for participation in national and international conferences, membership fee of professional bodies, and other professional developmental activities.
- 7. All Degree Certificates should be from recognized Universities/ Institutes. Candidates should have a consistently good academic record with First Class qualification. In case the Class is not mentioned by the Board/ University/ Institute, then 60% aggregate marks or 6.5 CGPA will be considered equivalent to first class.
- 8. Fresh appointments beyond the age of 60 years are encouraged only for distinguished candidates with impactful industry-oriented R&D career having ongoing or approved externally funded projects.
- 9. Candidates in service (Government/ Quasi Government/ State or Central Universities/ Educational Institutions/ PSUs) must apply through their present employer and are required to produce a "No Objection Certificate" at the time of interview. In these cases, a photocopy of the application may be sent in advance so as to reach NITK before the prescribed last date. They need to furnish a "Vigilance Clearance Certificate" issued by the Present Employer.
- 10. Candidates working as Engineers/ Scientific Officers/ Scientists in Central Government Research Organizations or reputed Industrial/ R&D organizations meeting all the eligibility conditions can also apply. Reputed Organizations for this purpose mean the Public Limited Companies, as defined in the Companies Act, 2013. They need to provide proof of their credentials certified through a competent authority.
- 11. Candidates who have acquired Ph.D. degree from NITK Surathkal can apply only after having at least 3 years of post-Ph.D. experience outside NITK. However, this does not apply to the candidates who are already working as regular faculty members of NITK.
- 12. More than six months of experience in a regular position with a pay scale in an organization are necessary to be considered as work experience. Experience rendered on part-time, daily wages or as visiting/ guest faculty will not be counted as work experience. The experience certificates attached with the applicant must clearly show the period of service and the scale of pay during the service in each organization to ascertain the actual work experience of the candidate.
- 13. Incomplete application forms will be ineligible for further processing. The cut-off date for determining the eligibility of candidates is the closing date for the receipt of online application forms (i.e., 16.08.2024).
- 14. For departments which do not have any vacancy at any higher Pay Level, movement to higher Pay Level shall be carried out as per the prescribed selection process, but it will be restricted to only serving faculty members of NITK Surathkal, in the respective Department. [As prescribed in note 1, point no. 5 of Schedule 'E' of NIT Statutes (Amended 2017) (Ref. Gazette of India No. 651, dated July 24, 2017)].
- 15. The Screening Committee will shortlist the applications based on the candidate's qualifications (degrees from higher-ranked universities will be preferred) and their areas of specialization (which should be relevant to the requirements of the Departments).
- 16. The short-listed candidates will be invited for teaching and research presentations, followed by an interview by a Selection Committee. The invitations will be sent to the e-mail address mentioned in the application form of the candidates.
- 17. List of eligible candidates invited for presentations and interview will be uploaded in the Institute website. Candidates are requested to visit the NITK website for any updates, subsequent amendments in the advertisement and results. No other separate letters or mails will be sent for this purpose.
- 18. Mere fulfillment of minimum qualifications and experience does not entitle any candidate to be invited for the selection process. The Institute reserves the right to restrict the number of candidates to a reasonable limit on the basis of academic qualifications, reputation of institutions studied, work experience, quality of research publications, and specific requirements of the individual Departments. No correspondence whatsoever will be entertained from candidates regarding the reason for not being called for the interview/ outcome of the interview.
- 19. The decision of the Institute related to all matters pertaining to the recruitment shall be final and binding on the applicants. Any dispute regarding the selection/ recruitment process will be subject to the Courts/ Tribunal having jurisdiction over Mangaluru.
- 20. Selected candidates should be prepared to join for duty at NITK within the stipulated time.
- 21. Period of probation will be one year, which may be extended by NITK Board of Governors depending on the performance during the year.

- 22. The contractual appointment in the case of Assistant Professor Grade-II stands terminated at the end of tenure not exceeding five years.
- 23. NITK will contact the referees listed in the application form through their email addresses to request the reference letter.
- 24. The SC/ST/PwD candidates invited for the interview shall be reimbursed as per Govt. of India norms for the onward and return journey by the shortest route from their correspondence address/ working place in India subject to production of ticket(s), proof of working/ residence, and self-attested documents of eligibility.
- 25. SC/ST/OBC (Non-Creamy Layer) candidates should submit a copy of the relevant caste/community certificate along with their application. OBC candidates should include a valid Non-Creamy Layer certificate in the format prescribed by the Govt. of India issued on or after 01.04.2024 by the competent authority. Applications without any caste/community or valid non-creamy layer certificates will be considered in the GENERAL category. Candidates claiming reservation under the Economically Weaker Section (EWS) category are required to submit an EWS certificate per GOI OM No. 36039/1/2019- Esst. (Res) dated 31.01.2019. EWS certificate submitted in support of the claim of reservation under this category must be obtained from the competent authority on or after 01.04.2024.
- 26. Persons with disability (PwD) are required to submit the Disability/Medical Certificate in the proforma prescribed and issued by the competent medical authorities for the purpose of employment as per Government of India norms with duly completed application form. Persons suffering from not less than 40% of the disability shall only be eligible for the benefit of reservation under this category. For the purpose of reservation of posts, the Institution will be regarded as one unit.
- 27. All original documents including valid ID Proof will have to be produced at the time of interview.
- 28. This being an advertisement governed by the Flexible Recruitment Rules, relevant instructions from the Ministry of Education (Govt. of India) issued till the date of the interview will be applicable.
- 29. Summitting an "Attestation Form" is mandatory for all applicants. Applicants need to download the "Attestation Form" (Annexure I), fill in all the relevant details by hand, and attach with downloaded application form along with other relevant documents. A scanned copy (PDF) of the same needs to be uploaded in the Application Portal.
- 30. Canvassing in any form will lead to disqualification for the post.
- 31. The Institute shall retain the applications of non-shortlisted candidates and non-selected candidates only for six months after the completion of the recruitment process.
- 32. The following documents are to be uploaded to the recruitment website. Self-attested hard copies of the same are to be enclosed with the printout of the application and sent to NITK, Surathkal.
 - a. A valid, government-approved photo identity card (Aadhar/ Driving license/ Passport/ OCI card etc.).
 - b. Proof of Date of Birth.
 - c. Academic certificates starting from 10th class/ SSC/ SSLC (or equivalent)) up to present qualification.
 - d. Marks/ Grade cards at all levels starting from 10th Standard.
 - e. Category Certificate, Person-with-Disabilities certificate, EWS (if applicable).
 - f. Experience certificates, salary slips (if applicable).
 - g. Publications list as per SCOPUS (www.scopus.com). Proof of publishing Text/Reference Books, and book chapters.
 - h. Proofs of R&D projects and consultancies completed/ongoing.
 - i. Proofs of mentoring Ph.D scholars, Postdoctoral Fellows, M.Tech. and B.Tech. project students.
 - j. Proofs of patents granted/ filed.
 - k. Details of administrative responsibilities handled.
 - I. Details of Workshops/ FDP/ Short term courses/ Continuing education programmes/ National/ International Conferences/ GIAN courses organized/ conducted.
 - m. Details of significant outreach activities.
 - n. Proofs of Fellowships/ Awards/ Prizes earned.
 - o. Copy of processing fee payment receipt.
 - p. Duly filled and signed "Attestation Form".
 - q. No Objection Certificate issued by the Present Employer (if applicable).
 - r. Vigilance Clearance Certificate issued by the Present Employer (If applicable).
- 33. Candidates are requested to go through the information and annexures given in the online recruitment portal.

5. Checklist of Certificates, Testimonials & Documents (Uploaded/ Enclosed)

SI. No.	Item	Yes/ No
1	Photo Identity Card	
	Upload Aadhar/ Driving license/ Passport/ OCI card etc.	
2	Proof of Date of Birth	
	Upload the Date of Birth Certificate/ 10th class marks card	
3	Category Certificate (SC/ST/OBC-NCL/EWS/PwD)	
	Upload the certificate	
4	Academic Records (from 10 th class to PhD)	
	Upload all degree certificates and marks/grade sheets	
5	Work Experience Certificates	
	Upload the certificate showing the duration and pay scale	
6	Current Employment Certificate	
	Upload the certificate/salary slip	
7	Journal Publications, Patents and Copyrights	
	Upload the Scopus.com pages; Upload the first page of the	
	paper/patent containing the author details	
8	Conferences/Workshops Attended and Papers Presented	
	Upload the first page of the paper containing the author details	
9	Workshops/ Conferences/Short-Term Programs Organized	
	Upload the certificates/ relevant documents	
10	Externally Sponsored R&D and Consultancy Projects	
	Upload the sanctioned letters/completion certificates	
11	Fellowship/Membership of Professional Bodies	
	Upload copies of the membership certificates	
12	Awards, Prizes, Honours and Recognitions	
	Upload the certificates	
13	Guidance of Post-Doc, Ph.D., PG and UG students	
	Upload the Official Memorandum (OM) issued by the	
4.4	Institute/Universities, the first page of the UG/PG project reports	
14	Administrative Responsibilities	
4.5	Upload the relevant letters of assignment Establishment of New Labs	
15	Upload the grant sanction orders issued by the relevant agency	
16	Significant Outreach Activities	
10	Upload the relevant proof or details of the outreach activities	
17	Other Certificates	
''	Upload the certificates or details of sports and creative activities	
18	"Attestation Form"	
10	Upload the hand-filled, duly signed attestation Form	
19	Copy of processing fee payment receipt	
20	No Objection Certificate issued by Present Employer	
	Upload the certificate issued by the competent authority	
21	Vigilance Clearance Certificate issued by Present Employer	
	Upload the certificate issued by the competent authority	