



NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL
(An Institute of National Importance, Established under NITSER Act, Government of India)
MANGALURU - 575 025, KARNATAKA STATE, INDIA

Ref. No.: 5210-Advt./Faculty-NITK-Estt/2023/B1

Date: 24th May, 2023

RECRUITMENT FOR FACULTY POSITIONS

National Institute of Technology Karnataka (NITK), Surathkal located on the northern side of Mangalore City is an Institute of National Importance that ranks among the top ten engineering institutes in India (NIRF, 2021 and 2022). Spread over nearly 300 acres with verdant greenery and the Arabian Sea lapping its western boundary, the campus provides an inspiring and peaceful ambience to its residents.

The Institute attracts the brightest students from India and abroad, and currently houses about 7000 students including 500 research scholars. Since its inception in 1960 (initially as Karnataka Regional Engineering College), NITK has produced over 35,000 alumni who have immensely contributed to the industry and R&D as well as other directions. Several alumni have created highly valued and impactful startup ventures.

More than 270 faculty members hailing from different parts of the country have made NITK their home. Several faculty are among the top 2 percent of the most-cited scientists in various disciplines. They have access to a unique Central Research facility housing ₹ 80 crores of sophisticated instruments for cutting-edge research. Some of them have filed patents for licensing to industry partners. The in-house Science & Technology Park (STEP) provides an exciting opportunity for entrepreneurial students and their faculty mentors for incubating start-up companies.

NITK is seeking to recruit faculty members from Indian nationals 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. They will leverage the well-established facilities, processes, reputation, and partners of the Institute to excel in their area of interest as well as create economic and social impact.



NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL
 (An Institute of National Importance, Established under NITSER Act, Government of India)
 MANGALURU - 575 025, KARNATAKA STATE, INDIA

Ref. No.: 5210-Advt./Faculty-NITK-Estt/2023/B1

Date: 24th May, 2023

Specializations required for Faculty Positions in various Departments

	Name of the Department	Area of Specialization	Essential Qualification
1.	Chemical Engineering (CH)	Modelling and Simulation , Process Development, Process system Engineering, Transfer Operations, Reaction Engineering, Particulate Systems, Energy & Environmental Engineering, Biotechnology / Biochemical Engineering	Ph.D in desired area of specialization and preceding degrees in relevant disciplines
2.	Chemistry (CY)	Inorganic Chemistry, Organic Chemistry, Physical Chemistry	Ph.D in desired area of specialization and preceding degrees in relevant disciplines
3.	Civil Engineering (CV)	Geology: Engineering Geology/ Structural Geology/ Petrology. Geotechnical Engineering: Reliability analysis in Geotechnical Engineering/ Computational Geomechanics/ Unsaturated Soil Mechanics/Machine Learning or Artificial Intelligence applications in Geotechnical Engg. Environmental Engineering: Air Quality Modelling/ Hazardous waste management/ Machine Learning or Artificial Intelligence applications in Environmental Engg. Structural Engineering: Structural Optimization/ Bridge Engineering/ Wind Resistant Design of Structures/ Structural Health Monitoring/ Machine Learning or Artificial Intelligence applications in Structural Engg. Transportation Engineering: Pavement engineering/ pavement design and monitoring/ Machine Learning or Artificial Intelligence applications in Transportation Engg. Construction Technology and Management: Construction Project Management/ Automation and Digitization in Construction/ Organization. Behaviour and Human Resource Management in Construction/ Quality and Safety Management in Construction/ Finance and Accounting in Construction/ Machine Learning or Artificial Intelligence applications. in Construction Technology and Management	Geology: Ph.D in desired area of specialization with M.Sc. in Geology/ Applied Geology Civil Engineering: Ph.D in desired area of specialization with B.Tech./ B.E. degree in Civil Engineering with M.E. or M.Tech. in the following specialisations: Geotechnical Engineering, Environmental Engineering, Construction Technology and Management / Construction Management / Construction Engineering and Management/ Construction Engineering and Infrastructure Management, Structural Engineering, Transportation Engineering.
4.	Computer Science and Engineering (CSE)	All basic and advanced areas of CS&E including, but not limited to the following list: Algorithms, Autonomous Systems, Big Data Analytics, Block chain Technology, Cloud Computing, Compilers, Computational and	Ph.D in desired area of specialization with preceding degrees in relevant disciplines

		Combinatorial Geometry, Complexity theory, Computational Mathematics, Computer Networks, Computer Systems and Architecture, Computer vision, Cyber Security, Cyber-physical Systems, Data Structures, Database Management Systems, Edge and fog computing, Federated Learning, Formal Verification, Graph Theory, High Performance Computing, Image Processing, Internet of Things (IoT), Logic, Machine Learning/ intelligence, Medical Imaging, Microprocessors and Micro Controllers, Network-On-Chip, Operating systems, Programming, Quantum computing, Software Defined Networks, Software Engineering, Speech and Audio Processing, System Software, Theoretical Computer Science, Underwater Communications.	
5.	Electrical and Electronics Engineering (EE)	Power and Energy Systems/ Control System/ New and Renewable Energy System/ Insulation and High Voltage Engineering/ Power Electronics and Electric Drives/ Application of Signal Processing, AI/ ML Algorithms in broader domain of Electrical Engineering.	Ph.D. in the desired area of specialization with B.E./ B.Tech. in Electrical Engineering/ Electrical and Electronics Engineering or equivalent and M. Tech/ M.E./ M.Tech. (Research)/ M.Sc. (Engineering) or equivalent. (OR) Ph.D. in the desired area of specialization with B.E./ B.Tech. in Electrical Engineering/ Electrical and Electronics Engineering or equivalent. (OR) Ph.D. in the desired area of specialization with Integrated M.Tech in Electrical Engineering/ Electrical and Electronics Engineering or equivalent.
6.	Electronics and Communication Engineering (EC)	Analog, Digital, RF and Mixed signal VLSI, Processor Architecture. Embedded Systems, Biomedical Circuits and Systems. Reconfigurable and Multi- core architectures and design. Microwave and Millimetre wave communication, Wireless Communication and Networks, IoT and sensor network Architectures for 5G/6G networks, Optical Networks, Meta Surfaces and Metamaterials. Broad domain of Signal Processing- Audio, Speech, Image, Biomedical and Natural Language Processing, Multi -rate, Sparse and Graph Signal Processing, Pattern Recognition and Machine Learning. Hardware Implementation of Signal Processing and Machine Learning Algorithms.	Ph.D. in the desired area of specialization with B.Tech./ B.E. in Electronics and Communication Engineering or equivalent. M. Tech./ M.E. in relevant branch.

7.	Information Technology (IT)	Algorithms/ Parallel and Distributed Computing/ Human Computer Interaction/ Web Technologies/ Database System/ Software Engineering/ Data Analytics/ Theoretical Computer Science/ Data Science/ Artificial Intelligence/ Machine Learning/ Deep Learning/ Computer System Design/ Operating Systems/ Computer Networks/ Security/ Cyber Physical Systems/ Computer Vision/ Soft Computing/ Digital Signal Processing/ Game Theory and Optimization Techniques.	PhD Degree with the area of specializations M.E./ M. Tech. in Computer Science & Engineering/ Information Technology/ allied areas; and B.E./ B. Tech. in Computer Science & Engineering/ Information Technology/ Information Science & Engineering and allied branches of Computer Science & Engineering and Information Technology/ Electronics and Communication Engineering/ Electrical and Electronics Engineering.
8.	Mathematical and Computational Sciences (MACS)	Machine learning and Artificial Intelligence, Big Data Analytics, Data Science, Cloud/ Fog/ Distributed Computing, Block-chain Technology, Internet of Things, Theoretical Computer Science/ Algorithms, High Performance Computing, Bioinformatics, Computer Vision, Statistics/ Applied Statistics, Operations Research, Speech/ Video/ Image Processing, Optimization Techniques.	Ph.D in respective specialization and preceding degrees in relevant disciplines
9.	Mechanical Engineering (ME)	Fuel Cells and Energy Storage, Green Energy, Experimental and Numerical Heat Transfer, Microfluidics, Porous Media Heat Transfer, Atmospheric Science, Metal Casting, Welding Technology, Machining, Metrology and Measurements, Production Management, Metal Forming, Tribology, Micro/Nano Manufacturing, Rotor Dynamics, Non-linear Dynamics, Molecular Dynamics/Atomistic Simulation, Multi-scale methods, Aeroelasticity, Bio-Mechanics, Design for Sustainability, Sensors and Actuators, Control Engineering, Microcontrollers, Electric Vehicles and Automotive Electronics, NEMS and Quantum Sensors, Digital Manufacturing, Artificial Intelligence and Machine Learning, Data Mining, Bio-Medical Electronics, Automation Systems and IoT, Robotic System.	Ph.D in respective specialization with Bachelor degree in Mechanical Engineering.
10.	Metallurgical and Materials Engineering (MME)	Iron and Steel Making/ Extractive Metallurgy of Ferrous and Non Ferrous metals.	Ph.D in respective specialization with B.E./ B.Tech. degree in Metallurgy/ Metallurgical and Material Engineering.
11.	Mining Engineering (MN)	Application of IT, IoT, AI and Machine Learning etc. in Mining Engineering and Mine Environment. Mine planning and design.	Ph.D in respective specialization with B.Tech./ M. Tech. in relevant discipline.
12.	Physics (PH)	"Experimental condensed matter Physics" with specialization in Electronics Circuits and Devices/ Thin films, and Nanomaterials/ Energy Materials/ Oxide, Bio-active glasses.	Ph.D in respective specialization and preceding degrees in relevant disciplines

13.	School of Humanities, Social Sciences and Management (SHSSM)	Information Systems and Analytics, Economics, Operations Management and English Specializations. Finance, Organizational Behavior and Human Resource management, Marketing Management.	Ph.D in the desired area of specialization with preceding degrees in relevant disciplines
14.	Water Resources and Ocean Engineering (WROE)	Water Resources and Management/ Hydraulics Engineering; Marine structures/ Offshore structures/ Ocean Engineering; Geo informatics/ Remote Sensing & Geographical Information System.	Ph.D. in the desired area of specialization with B.E./ B.Tech. (Civil Engineering) M.E./ M.Tech. - Water Resources and Management/ Hydraulics Engineering, Marine structures/ Offshore structures/ Ocean Engineering, Geo informatics/ Remote Sensing & Geographical Information System.

VACANCY MATRIX

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

A. For Assistant Professor:

Grade II (Pay Levels 10 / 11, as per 7th CPC):

Grade I (Pay Level 12 as per 7th CPC):

Tentative vacancies available: 54

Regular Vacancies: 31

Category	Departments/ School	Vacancies
General	CSE, IT, MACS & ME	14
SC	MACS & SHSSM	04
ST	CSE & IT	02
OBC	CSE, EC, IT, MACS & ME	08
EWS	MACS, ME & SHSSM	03

Backlog Vacancies: 23

Category	Departments/ School	Vacancies
SC	CSE & MACS	02
ST	CH, CV, CSE, EC, MACS, ME, MME, SHSSM & WROE	09
OBC	CH, CV, CSE, EC, EE, IT, MACS, ME, MME, MN, SHSSM & WROE	12

B. For Associate Professor (Pay Level 13A2, as per 7th CPC):

Tentative vacancies available: 46

Category	Departments/ School	Vacancies
General	CSE, CV, EC, IT, MACS, ME & SHSSM	21
SC	CSE, CV, EC, EE, IT & MACS	06
ST	EC, MACS & SHSSM	03
OBC	CSE, CV, EC, EE, IT, MACS & PH	12
EWS	EC, EE, IT & MACS	04

C. For Professor (Pay Level 14A, as per 7th CPC):

Tentative vacancies available: 07

Category	Departments/ School	Vacancies
General	CSE & IT	5
SC	IT	1
OBC	SHSSM	1

Note: Gazette Notification dated 21st July, 2017 vide Note 1 (5) under Schedule 'E' stated the following: "For the departments which are not having any vacancy, movement of Higher Academic Grade Pay or cadre shall be carried out as per specified selection process but it will be restricted to only for serving faculty members of the respective departments".

Application Procedure for Faculty Positions

The application form has to be submitted both in online and printed modes.

1. 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 in the recruitment portal along with the application form. A PDF copy of the application form will be generated after submission of the online form.
2. 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.

Online application should be submitted on or before Friday, 23rd June, 2023 by 05:30 p.m. IST

The PDF printout of the online application duly signed (Separate for each post) along with self-attested photocopies of all relevant documents should be sent in sealed envelope superscribed as Application for the post of "....." in the Department of at NITK, Surathkal to the address given below through Speed Post/ Registered Post.

Printed application must reach NITK, Surathkal on or before Friday, 30th June, 2023 by 05.30 p.m. IST.

Processing Fee (non-refundable) for each Application:

- ₹2,500/- (Rupees Two Thousand Five Hundred Only) for General & OBC candidates.
- ₹1,000/- (Rupees One Thousand Only) for SC, ST, PwD and EWS candidates.

The processing fee can be paid online from a bank, and the candidate may use the following details for NEFT/RTGS request:

Beneficiary Name : NITK, Surathkal
Bank Name : STATE BANK OF INDIA
Branch Name : Surathkal (NITK Campus)
IFSC Code : SBIN0002273
Account No. : 37772503911
Mode of A/C : Current A/C

Important: Mention the application number and candidate name in the NEFT payment form. Mention the UTR in the application form.

Address to send the printed hardcopy of the application and relevant documents:

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

Information for Faculty Candidates

- 1) Applications are invited from qualified Indian Nationals only for faculty positions at NITK in various departments and disciplines.
- 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) 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 form 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 certificate/ identity proof issued by the competent authority.
- 4) NITK strives to have a workforce which also reflects gender balance and hence women candidates are especially encouraged to apply.
- 5) 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.
- 6) Fresh appointments beyond the age of 60 years are encouraged only for faculty with exceptionally brilliant industry-oriented R&D career with ongoing or approved externally funded projects.
- 7) Candidates in service (Government/ Quasi Government/ State or Central Universities/ Educational Institutions / PSUs) should send their applications through proper channel. In these cases, a photocopy of the application should be sent in advance so as to reach NITK before the prescribed last date. Such candidates are required to produce “**No Objection Certificate**” at the time of interview, failing which they may not be considered for interview.
- 8) 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 the proof of their credentials certified through a competent authority.
- 9) Candidates who have acquired Ph.D. degree from NITK 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 regular faculty members of NITK.
- 10) 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 faculty will not be counted as work experience.
- 11) Incomplete application forms will be ineligible for further processing. The cutoff date for determining the eligibility of candidates is the closing date for the receipt of online application forms (i.e., 23.06.2023).
- 12) The Screening Committee will shortlist the applications based on 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).
- 13) The short-listed candidates will be invited for teaching and research presentations, followed by interview by a Selection Committee. The invitations will be sent to the e-mail address mentioned in the application form of the candidates.

- 14) 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.
- 15) 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, work experience, credit points, and specific requirements of the individual Departments.
- 16) The SC/ST/PwD candidates invited for the interview shall be reimbursed as per Govt. of India norms for the to and fro 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.
- 17) 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 Courts/ Tribunal having jurisdiction over Mangaluru.
- 18) Selected candidates should be prepared to join duty at NITK within the time granted.
- 19) Period of probation will be one year, which may be extended by NITK Board of Governors depending on the performance during the year.
- 20) The contractual appointment in the case of Assistant Professor Grade-II stands terminated at the end of tenure not exceeding five years.
- 21) In addition to the applicable Pay Level of the respective positions as per 7th CPC, faculty are eligible for admissible allowances (DA, HRA, CCA etc.) as per prevalent Central Government/ Institute Rules. Exceptionally meritorious and experienced candidates may be granted higher pay on the recommendation of the Selection Committee.
- 22) The following documents are to be uploaded in the recruitment website. Self-attested hardcopies of the same are to be enclosed with the printout of the application and sent to NITK, Surathkal. The documents are required for supporting the candidature as per the credit calculation system outlined in the Gazette notification dated 24th July, 2017 (Annexure-III in recruitment website).
 - (a) Candidate photograph with candidate signature.
 - (b) Proof of Date of Birth
 - (c) Academic certificates starting from SSC/ SSLC (or equivalent) up to present qualification.
 - (d) Marks/ Grade cards at all levels starting from SSLC
 - (e) Copy of the Category Certificate, Person-with-Disabilities certificate (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 PhD thesis (lone or joint), M.Tech. theses, and B.Tech. projects guided
 - (j) Proofs of patents granted/ filed.
 - (k) Details of administrative responsibilities handled.
 - (l) 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.
- 23) NITK will contact the referees listed in the application form through their email addresses to request the reference letter.

- 24) 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 01.4.2023 by the competent authority. Applications without any caste/community or non-creamy layer certificates will be considered in the GENERAL category. Candidates claiming reservation under Economically Weaker Section (EWS) category are required to submit EWS certificate valid for 2022-23 as per GOI OM No. 36039/1/2019- Esst. (Res) dated 31/01/2019.
- 25) All original documents including valid ID Proof will have to be produced at the time of interview.
- 26) 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.
- 27) Canvassing in any form will lead to disqualification for the post.
- 28) Candidates are requested to go through all the information and annexures provided in the online recruitment portal.



RECRUITMENT FOR FACULTY POSITIONS

Checklist of Certificates / Testimonials (Uploaded/Enclosed) (Tick the appropriate ones)

Sl. No.	Item	Number of documents
1.	Date of Birth Document Upload SSLC marks card	
2.	Category Certificate (SC/ST/OBS/EWS/PwD) Upload the certificate	
3.	Academic Records (from SSLC to PhD) Upload all degree certificates and marks/grade sheets	
4.	Work Experience Certificates Upload the certificate	
5.	Current Employment Certificate Upload the certificate/salary slip	
6.	Journal Publications, Patents and Copyrights Upload the scopus.com pages, Upload the first page of the paper/patent containing author details	
7.	Conferences/Workshops Attended and Papers Presented Upload the first page of the paper containing author details	
8.	Workshops/ Conferences/ Short Term Programs Organized Upload the certificates/ relevant documents	
9.	Sponsored and Consultancy Projects Upload the sanctioned letters/completion certificates	
10.	Fellowship/Membership of Professional Bodies Upload copies of the membership certificates	
11.	Awards and Recognitions Upload the certificates	
12.	Guidance of Ph.D., PG and UG students Upload the OM issued by Institute/Universities	
13.	Administrative responsibilities Upload the relevant letters of appointment	
14.	Establishment of new Labs Upload the funding received from the relevant agency	
15.	Significant outreach activities carried out Upload the relevant proof or details of the outreach activities	
16.	Other Certificates Upload the certificates or details of sports and creative activities	
17.	Copy of processing fee payment receipt.	
