# NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

Mangaluru- 575025, Karnataka State

# INFORMATION BULLETIN





Admission to Full Time Self-Financed Post Graduate Programmes 2021-22 (M.Tech., M.Sc., MCA and MBA programmes)

 Website: <a href="https://www.nitk.ac.in">www.nitk.ac.in</a>

 Fax: 91-824-2474033

 E-Mail: <a href="mailto:deanacad@nitk.ac.in">deanacad@nitk.ac.in</a>

# NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

Mangalore- 575025, Karnataka State, India



# **INFORMATION BULLETIN**

Admission
To
Full Time Self-Financed Post Graduate Programmes
2021-22
(M.Tech., M.Sc., MCA and MBA programmes)

 Website: <a href="https://www.nitk.ac.in">www.nitk.ac.in</a>
 Phone : 2474000-2474023

 Fax : 91-824-2474033
 E-Mail : deanacad@nitk.ac.in

# **CONTENTS**

		Page No.
1.	The Institute	1
2.	Location	1
3.	Self-Contained Residential Campus	1
4.	Computing Facilities and Campus Network	1
5.	Library Facilities	2
6.	Courses of Study	2-3
_	Admission to Full time Self -financed PG programmes	3-4
7.	7.1. Minimum Qualifications/Eligibility	3-4
	7.2. Selection Procedure	4
	7.3. How to Apply	4
8.	Intake for Self-Financed PG Programmes	5
9.	Documents to be Produced	6
10.	Fees and Deposits	6-7

### NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

#### 1. The Institute:

The National Institute of Technology Karnataka (NITK), Surathkal is rated as one of the top Institutions in India. Since its inception in 1960 as the Karnataka Regional Engineering College, the Institute has established itself as a premier center engaged in imparting quality technical education and providing support to research and development activities. The Government of India as per the NIT Act 2007, declared NITs as Institutes of National Importance. The Institute is governed by the rules and statutes of the NIT Act. The Institute has a long tradition of research for several years in both traditional and modern areas of engineering and sciences in all the departments. The Institute has been actively involved in application oriented research focussed in resolving problems faced by the society in several areas like environment, water resources, rock mechanics, new structures, VLSI, etc. NITK attracts students from all over the country and abroad. The Institute admits students to the B.Tech degree program on the basis of the Joint Entrance Examination (JEE Mains). Foreign students are admitted on various student exchange programs through MEA, ICCR, etc., and scheme of Direct Admission to Students Abroad (DASA). Scholarship seats for M.Tech programs are awarded on the basis of the Graduate Aptitude Test in Engineering (GATE) and a few seats are available for sponsored students. The institute admits students to MCA Program on the basis of NIMCET, admission to MBA is made on the basis of CAT / MAT/ GATE score and for M.Sc Program admissions are made based upon the JAM scores. A few seats are also available under self -financed category for M.Tech., M.Sc., MCA and MBA programmes. Every year the Institute admits candidates with Institute fellowships and also admits sponsored/external candidates to the doctoral program. NITK graduates are sought after by top industries/companies and the Institute has been rated as one of the best Institutions in the country with regard to student placements.

#### 2. Location:

NITK is located in Mangalore City along the Kanyakumari-Mumbai National Highway 66. It is well connected by road, rail and by air to major cities in India and a few international destinations. The Institute is located amid 300 acres of sylvan surroundings with the picturesque Western Ghat Mountains on the east and the sun-kissed sands of the Arabian sea to the west. The Mangalore (Bajpe) airport and the Mangalore Railway Station are about 20 km. away from the Campus, while Surathkal Railway Station is about 3 km away from the campus. The campus is located far away from the din and bustle of a city and is very conducive for academic activities. The climate throughout the year is equitable and has temperature range of 18 to 38° Celsius. The campus being on the sea shore, is blessed with clean air and healthy climate.

#### 3. Self-Contained Residential Campus:

The Institute is a residential Institution with adequate hostel facilities for boys and girls. All the students are expected to stay in the Institute hostels. To suit the tastes of the students from different regions, independent messes of various types are run in different hostels. The amenities include 11 Hostel blocks for boys & 8 hostel blocks for ladies with all basic amenities. A good number of faculty quarters provide ample opportunity to draw upon benefits of campus life. Vast stretches of play fields, a swimming pool, a gymnasium, a central library, a well-equipped Health Care Centre, post office, branches of State Bank of India and Canara Bank, both with ATM facilities and two canteens are the amenities available. N.C.C. and N.S.S. constitute two more prominent extra-curricular activities in addition to a host of activities through music, photography, web enthusiast and dramatic clubs of the Institute.

#### 4. Computing Facilities and Campus Network:

NITK has a campus wide network spanning the entire campus - academic buildings, guest houses, student hostels and campus residences. The campus backbone services are provided with about 20 kms of 12 / 24 core OFC using 1 Gbps and 10 Gbps backbone to the different buildings and broad band to the residences. Departments, Residences (through the broadband), Directorate (and administrative net), Guest houses and Hostels are individually connected to the core switch. The hostel networks are integrated into the academic network of NITK sharing the Internet bandwidth of the Institute. The Institute has 24 x 7 Internet connectivity. The journals subscribed through INDEST consortium are available throughout the campus LAN. In addition to this the students can access learning material from the internet. The Wi-Fi network is provided as an extension of the wired networks in the different buildings with close to 1000 indoor access points and 40 outdoor access points, which provides transparent seamless migration of connectivity between the access points to the user. NITK has 5Gbps Internet bandwidth and currently being upgraded to 10Gbps. The NITK Data centre acts as an integration hub of OFC/backbone. It houses Internet connections to BSNL and National Knowledge Network, associated networking equipments and has sufficient hardware to handle the critical backbone network services such as the core switch cluster, firewalls, academic and administrative servers and virtual machine hosts. Main servers are connected to the data centre network. CCC Uses Virtualisation with Proxmox virtualisation environment / Ubuntu System containerisation environment. Data centre also houses the NITK Websites. CCC hosts a campus-wide license to MATLAB, Simulink, and companion products. All faculty, researchers, and students are eligible to download and install these products on their university computers as well as their personally-owned computers. The network infrastructure facility management of NITK is outsourced with a help desk facility. The requirement of compute and network resources are assessed from time to time and upgraded accordingly.

### 5. Library Facilities:

Central Library at NITK Surathkal is the window to the world of latest information in sciences, engineering, technology & management. The library has a rich collection of print materials (1.5 lacs) on all the branches of Engineering, Science, Social Sciences, Humanities and Management. The collection includes reference books, text books, bound volumes, CDs, etc. The library subscribes core collection of print journals (100 plus), e-journals (12045), e-databases (25), e-books (11202) and others. The library is also a core member of e-ShodhSindu - a Consortia for Higher Education E-Resources which provides access to more than 10,000 qualitative electronic resources including full-text, bibliographic and factual databases to the students.E-journals available to access with various reputed online scientific databases such as American Chemical Society, American Physical Society, IoP, Royal Society of Chemistry, Emerald, Taylor & Francis, American Mathematical Society, Annual Reviews, ASME, IEEE, JSTOR, MathScinet, Nature, Science-Direct, SpringerLink, etc. The Library also subscribes to premium version of Grammarly - an automated grammar tutor and revision tool for writing effective and mistake-free documents. Library offers Plagiarism Checking Service using "Ouriginal" web tool for the Ph.D/M.Tech by Research students. Remote Access to all the eResources and mobile app are other important services of the library.

Library has been fully computerised with integrated web-based library management software to Koha, which enables users to search real-time book status and reservations. The library is fully air conditioned with more than 1000 seating capacity. Newly established eLibrary Complex has the State-of-the-Art modern IT facilities with e-Studio for lecture capturing and live streaming facility, 2 Cyber Libraries with 50+ computers to conduct hands-on training, 2 Seminar Halls of 50+ Capacity each, 8 Discussion Rooms, dedicated Research Scholars Section, Digital Reading Rooms, Laptop Zones etc. catering to more than 7000 on campus library users 24X7 along with in-housed cafeteria.

#### **6.** Courses of Study:

The Institute offers undergraduate programmes in 9 disciplines and post-graduate programmes in 31 specialized areas. The Institute also offers facilities for research leading to Ph.D. degrees in various branches of Engineering, Science and Humanities & Social Sciences. The academic responsibilities are shared by the following 14 Teaching Departments:

- 1. Chemical Engineering
- 2. Chemistry
- 3. Civil Engineering
- 4. Computer Science and Engineering
- 5. Electrical & Electronics Engineering
- 6. Electronics & Communication Engineering
- 7. Information Technology
- 8. Mathematical and Computational Sciences
- 9. Mechanical Engineering
- 10. Metallurgical & Materials Engineering
- 11. Mining Engineering
- 12. Physics
- 13. School of Management
- 14. Water Resources and Ocean Engineering (Formerly Applied Mechanics & Hydraulics Department)

The Teaching Departments responsible for conducting the 31 postgraduate programmes which include M.Tech, M.Tech by Research, M.Sc, MCA and MBA are shown below. M.Tech (Research) programmes are offered in all the specializations available under M Tech.

#### a) Civil Engineering:

i) M.Tech (ST) - Structural Engineering
 ii) M.Tech (GT) - Geotechnical Engineering
 iii) M.Tech (EN) - Environmental Engineering
 iv) M.Tech (TS) - Transportation Engineering

v) M.Tech (CM) - Construction Technology and Management

#### b) Water Resources and Ocean Engineering (Formerly Applied Mechanics & Hydraulics Department)

vi) M.Tech (MS) - Marine Structures

vii) M.Tech (WR) - Water Resources Engineering and Management

viii) M.Tech (GI) - Geoinformatics

#### c) Mechanical Engineering:

ix) M.Tech (TH) - Thermal Engineering
 x) M.Tech (MF) - Manufacturing Engineering
 xi) M.Tech (MC) - Mechatronics Engineering
 xii) M.Tech (DP) - Mechanical Design

#### d) Electronics & Communication Engineering:

xiii) M.Tech (VL) - VLSI Design

xiv) M.Tech (CE) - Communication Engineering & Networks xv) M.Tech (SPML) - Signal Processing and Machine Learning

#### e) Chemical Engineering:

xvi) M.Tech (CE) - Chemical Engineering

xvii) M.Tech (EH) - Environmental Science & Technology

xviii) M.Tech (IB) - Industrial Biotechnology

#### f) Metallurgical & Materials Engineering:

xix) M.Tech (PM) - Process Metallurgy xx) M.Tech (ML) - Materials Engineering xxi) M. Tech (NT) - Nanotechnology

#### g) Electrical & Electronics Engineering:

xxii) M.Tech (PS) - Power & Energy Systems

#### h) Information Technology:

xxiii) M.Tech (IT) - Information Technology

#### i) Computer Science and Engineering:

xxiv) M.Tech (CS) - Computer Science and Engineering

xxv) M.Tech (IS) - Computer Science and Engineering - Information Security

#### j) Mining Engineering:

xxvi) M.Tech - Rock Excavation Technology and Management. (by Research) only

#### k) Mathematical and Computational Sciences:

xxvii) M Tech (CD) - Computational and Data Science xxviii) M.C.A. (MCA) - Master of Computer Applications

#### 1) School of Management:

xxix) M.B.A. - Master of Business Administration

#### m) Chemistry:

xxx) M.Sc.(CY) - M.Sc. in Chemistry

## n) Physics:

xxxi) M.Sc.(PH) - M. Sc. in Physics

## 7. Admission to Full time Self -financed PG programmes:

NITK Surathkal will admit students for the Full time self-financed M.Tech., M.Sc. MCA and MBA programmes from the Academic year 2021-22. The candidates who fulfil the prescribed minimum eligibility criteria as given in the following section may apply for the same. The student who is selected under the Full time self-financed category will not receive any scholarship/assistantship.

#### 7.1. Minimum Qualification / Eligibility:

#### A. M.Tech. Programme (Common to all M.Tech Programmes):

Admission shall be open to Indian nationals who have passed the prescribed qualifying examination with a Cumulative Grade Point Average (CGPA) of at least 6.5 in the 0-10 scale grading system, OR not less than 60% marks in the aggregate (taking into account the marks scored in all the subjects of all the public/university examinations conducted during the entire

prescribed period for the degree programme). However, this prescribed minimum shall be a CGPA of 6.0 OR 55% marks in the aggregate for SC/ST/PwD candidates.

For information on the prescribed qualifying examinations for various M.Tech Programmes offered by the various departments at NITK, please refer the CCMT 2021 website:

 $\underline{https://ccmt.nic.in/CCMTRegistration2021/Report/SeatMapping.aspx?enc=Nm7QwHILXclJQSv2YVS+7s2FzZsNnuHw3Cbe}\\ \underline{c0Rv2wLX1diHCh11GpHuMeDB4NLH}$ 

#### **B.** MBA Programme:

Admission to MBA Programme shall be open to Indian nationals who have passed Bachelor's Degree in any discipline from a Recognized University with a Cumulative Grade Point Average (CGPA) of at least 5.5 in the 0-10 scale grading system, OR not less than 50% marks in the aggregate (taking into account the marks scored in all the subjects of all the public/university examinations conducted during the entire prescribed period for the degree programme). However, this prescribed minimum shall be a CGPA of 5.0 OR 45% marks in the aggregate for SC/ST/PwD candidates.

#### C. M.Sc Programmes:

Admission to M.Sc programme in Chemistry/Physics is open to Indian nationals who have passed B.Sc degree with Chemistry as one of the subjects for MSc Chemistry and Physics as one of the subject for MSc Physics, with a Cumulative Grade Point Average (CGPA) of at least 6.5 in the 0-10 scale grading system, OR not less than 60% marks in the aggregate (taking into account the marks scored in all the subjects of all the public/university examinations conducted during the entire prescribed period for the degree programme). However, this prescribed minimum shall be a CGPA of 6.0 OR 55% marks in the aggregate for SC/ST/PwD candidates.

- D. Admission to MCA programme is open to Indian nationals who have passed the prescribed qualifying examination with a Cumulative Grade Point Average (CGPA) of at least 6.5 in the 0-10 scale grading system, OR not less than 60% marks in the aggregate (taking into account the marks scored in all the subjects of all the public/university examinations conducted during the entire prescribed period for the degree programme). However, this prescribed minimum shall be CGPA of 6.0 OR 55% marks in the aggregate for SC/ST/PwD candidates. The prescribed qualifying examinations are,
- (i) B.Sc. / B.Sc. (Hons) / BCA / BIT / B.Voc. (Computer Science/ Computer Applications)/ BBA (Computer Applications) of minimum three years full-time programme from a recognized University with Mathematics/ Statistics as one of the subjects OR (ii) B.E./ B.Tech. from a recognized University

#### 7.2. <u>Selection Procedure:</u>

Selection of candidates for admission to Self-Financed PG programmes will be based upon the academic performance in the qualifying examinations, written test and interview with due weightage for each component as specified by the DPGC of the concerned department.

#### 7.3. How to Apply:

The Information Bulletin, Seat Matrix and Online Application portal for admission to Self-Financed PG programmes is available on the Institute website www.nitk.ac.in. The applicants need to register online with the portal. The registered candidates have to complete the Online Application form and pay the prescribed application fee, i.e. Rs 500 (OC / OBC) and Rs 150 (SC / ST / PwD) through IRIS portal as per schedule, to be notified soon.

The hardcopy of the completed application form with payment receipt and copies of all necessary documents is to be sent to the Assistant Registrar (Academic), National Institute of Technology Karnataka, Surathkal, Srinivasnagar, Mangalore -575 025, Karnataka to reach as per schedule, to be notified soon. "Application for M.Tech/MBA/M.Sc./MCA Admission in the Department of ........" should be clearly mentioned on the top of the envelope.

Applications which are incomplete / defective / received late are liable to be rejected summarily and no correspondence will be entertained on such applications.

Note: If a candidate desires to apply to more than one programme he / she should submit separate APPLICATION along with the payment Receipt of Application fee for each program. The candidates called for interview will have to appear for written test and interview at their own cost. The written test and interview will be held at N.I.T.K., Surathkal either online or offline.

# **8.** Intake for the Self-Financed programmes:

S.N	Department	Specialization	No of Seats
1.	Civil Engineering	Structural Engineering	5
2.	Civil Engineering	Geotechnical Engineering	5
3.	Civil Engineering	Environmental Engineering	5
4.	Civil Engineering	Transportation Engineering	5
6.	Water Resources and Ocean Engineering	Marine Structures	5
7.	Water Resources and Ocean Engineering	Water Resources Engineering and Management	5
8.	Water Resources and Ocean Engineering	Geoinformatics	5
9.	Mechanical Engineering	Thermal Engineering	10
10.	Mechanical Engineering	Manufacturing Engineering	10
11.	Mechanical Engineering	Mechatronics Engineering	5
12.	Mechanical Engineering	Mechanical Design	10
13.	Electronics & Communication Engineering	VLSI Design	8
14.	Electronics & Communication Engineering	Communication Engineering and Networks	8
15.	Electronics & Communication Engineering	Signal Processing and Machine Learning	8
16.	Chemical Engineering	Chemical Engineering	5
17.	Chemical Engineering	Environmental Science & Technology	5
18.	Chemical Engineering	Industrial Biotechnology	5
19.	Metallurgical & Materials Engineering	Process Metallurgy	5
20.	Metallurgical & Materials Engineering	Materials Engineering	5
21.	Metallurgical & Materials Engineering	Nanotechnology	5
22.	Electrical & Electronics Engineering	Power and Energy Systems	10
23.	Information Technology	Information Technology	5
24.	Computer Science and Engineering	Computer Science & Engineering	5
25.	Computer Science and Engineering	Computer Science & Engineering - Information Security	5
26.	Mathematical & Computational Sciences	Computational and Data Science	5
27.	Mathematical & Computational Sciences	MCA	5
28	Physics	MSc	7
29	Chemistry	MSc	5
30	SOM	MBA	10

#### 9. Documents to be Produced:

### A. At the time of counselling/written test/interview:

- 1. Original marks card of all Semesters/years of Masters /Bachelor's degree
- 2. Date of Birth Certificate in Original (SSLC / X Std.)
- 3. Degree Certificate or Course Completion certificate from college (if qualifying degree exam results are awaiting)
- 4. Caste Certificate if belonging to SC / ST (original)
- 5. GATE / NET Score Card (if applicable)
- 6. Pass certificate for A.M.I.E. candidates (M Tech.)
- 7. Persons with Disabilities (PWD) certificate, if applicable.

#### B. Documents to be Submitted at the Time of Admission:

- 1. Admission order issued by Competent Authority.
- 2. Original marks card of qualifying examinations (First to Final Year) with two sets of duplicate copies. (The spelling and order of the name should be same in all the years of marks card, degree certificate and Migration Certificate).
- 3. Course Completion certificate from college (if qualifying degree exam results are awaiting)
- 4. Degree Certificate or Provisional Pass Certificate issued by the University.
- 5. Medical Certificate (general fitness).
- 6. Date of Birth Certificate in original (X Std. or SSLC).
- 7. Caste Certificate in case of SC / ST.
- 8. Transfer Certificate.
- 9. Conduct Certificate.
- 10. Aadhar card copy.
- 11. Persons with Disabilities (PWD) certificate, if applicable.
- 12. Migration Certificate.

In case the result of qualifying degree is awaited, provisional admission will be given subject to meeting eligibility requirements latest by 30<sup>th</sup> September 2020.

#### 10. Fees and Deposits:

# FEE STRUCTURE FOR SELF-FINANCED M.Tech, M.Sc, MCA AND MBA PROGRAMME\_FOR THE ACADEMIC YEAR 2021-2022

	First Year 2021-22 Batch	
Semester Fees	I Sem. Rs.	II Sem. Rs.
Tuition fee #	75000	75000
Institute Admission Fee	1100	-
Library & E-resources Fee	3310	-
Development Fee	2205	2205
Security Deposit (refundable)	5510	-
Alumni Fee	2210	-
Career Development Fee	1650	-
Convocation Fee	2210	-
Health Care Facility**	550	-
Students Activities Fee**	2205	-
Swimming Pool Fee**	550	-
Campus Amenities**	550	-
Group Insurance coverage of students *	430	-
Central Computing Facility & Digital Resources	3310	
Day Scholar Total Fee	100790	77205

<b>Hostel Rent (For Hosteller)</b>		
Hostel Rent (including water/electricity charges) (i) Boys (Shared accommodation) (ii) Girls (Shared accommodation)	6620 6620	6620 6620
Hosteller Total fee (Shared accommodation)	107410	83825

## **Note: Refund of Fees:**

Any student who withdraws admission before the closing date of admission is eligible for the refund of all the fees and deposits, after deduction of a processing fee of Rs.1000 /- (Rupees One Thousand Only)

Ragging: If any incident of ragging comes to the notice of the authority, concerned student shall be given liberty to explain and if his explanation is not found satisfactory, the authority would expel him / her from the institution.