



**DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES**  
**NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL**  
MANGALURU - 575025, KARNATAKA, INDIA

2017-2018

### About the Department

The Department of Mathematics was (today called, the Department of Mathematical and Computational Sciences) started along with the institute (1960). The department initially catered to the needs of Engineering Mathematics for all UG and PG programs and subsequently, in 1988-89, introduced two PG programs namely, the Master of Computer Applications (MCA) and Master of Technology (M.Tech.) in Systems Analysis and Computer Applications (SACA). In 2003, the department started the regular doctoral programs in “Mathematics” and “Computer Applications”. The Department has started the M.Tech in Computational Mathematics (CMA) in 2014 in place of the earlier M.Tech (SACA).

### Department Vision

The vision is to develop and maintain overall academic excellence in the educational and research activities carried out.

### Department Mission

- To impart the best quality education in Mathematical fundamentals to all the Engineering students of the Institute.
- To produce high quality professionals to meet the needs of software industry through the PG programs.
- To engage in R&D work in the frontier areas of Mathematical and Computational Sciences.

### Programs Offered

Program Name	Annual Intake
M.C.A. (Master of Computer Applications)	92
M.Tech (Computational Mathematics)	22
Doctoral (Ph.D)	15

### Placement

Students of Mathematical and Computational Sciences are recruited by the companies like MERCEDES-BENZ. ORACLE, IBM, DELL. EMC,L&T, IDrive, SAP, VIRTUSA, VERIZON, SAPIENT,AMDOCS etc.

## BRIEF FACULTY PROFILES

Professors		<p><b>A Kandasamy, Ph.D</b></p> <p><b>Areas of Research :</b> CFD, Rheology, Tribology, Computational Techniques, Optimization Techniques, Genetic Algorithms, Bio-Informatics, Wireless Sensor Networks</p> <p>Email: kandy_aks@yahoo.com, kandy@nitk.ac.in</p> <p>Web Page: <a href="http://aks.nitk.ac.in/">http://aks.nitk.ac.in/</a> or <a href="http://macs.nitk.ac.in/faculty/kandasamy">http://macs.nitk.ac.in/faculty/kandasamy</a></p>	
	<p><b>Murulidhar N N, Ph.D</b></p> <p><b>Areas of Research:</b> Reliability Engineering, Stochastic Process</p> <p>Email: muruli@nitk.ac.in, murulidharnn@gmail.com</p> <p>Web Page: <a href="http://macs.nitk.ac.in/faculty/murulidhar-n-n">http://macs.nitk.ac.in/faculty/murulidhar-n-n</a></p>		
		<p><b>Santhosh George, Ph.D</b></p> <p><b>Areas of Research:</b> Functional Analysis, Operator Theory, Ill Posed Operator Equations, Non-linear Analysis.</p> <p>Email: sgeorge@nitk.ac.in</p> <p>Web Page: <a href="http://macs.nitk.ac.in/faculty/santhosh-george">http://macs.nitk.ac.in/faculty/santhosh-george</a></p>	
	<p><b>Suresh M Hegde, Ph.D</b></p> <p><b>Areas of Research:</b> Graph Theory and combinatorics</p> <p>Email: smhegde@nitk.ac.in</p> <p>Web Page: <a href="http://macs.nitk.ac.in/faculty/suresh-m-hegde">http://macs.nitk.ac.in/faculty/suresh-m-hegde</a></p>		
		<p><b>Shyam S. Kamath, Ph.D</b></p> <p><b>Areas of Research:</b> Graph Theory, Combinatorics</p> <p>Email: shyam@nitk.ac.in</p> <p>Web Page: <a href="http://macs.nitk.ac.in/faculty/shyam-s-kamath">http://macs.nitk.ac.in/faculty/shyam-s-kamath</a></p>	
	<p><b>B R Shankar, Ph.D</b></p> <p><b>Areas of Research:</b> Cryptography, Finite Fields, Functional Analysis, Number Theory, Operator Algebras</p> <p>Email: brs@nitk.ac.in, shankarbr@gmail.com</p> <p>Web Page: <a href="http://macs.nitk.ac.in/faculty/b-r-shankar">http://macs.nitk.ac.in/faculty/b-r-shankar</a></p>		

## Associate Professors

**Sujatha D. Achar**

**Areas of Research:** Numerical analysis, Theory of functions of complex variables  
 Email: sujatha\_achar@nitk.ac.in  
 Web Page: <http://macs.nitk.ac.in/faculty/sujatha-d-achar>

**R. Madhusudhan, Ph.D**

**Areas of Research:** Computer Network Security, Remote User Authentication, Mobile computing  
 Email: madhu@nitk.ac.in, madhu\_nitks@yahoo.com  
 Web Page: <http://macs.nitk.ac.in/faculty/r-madhusudhan>

**P Sam Johnson, Ph.D**

**Areas of Research:** Functional Analysis, Operator Theory  
 Email: sam@nitk.ac.in, nitksam@gmail.com  
 Web Page: <http://macs.nitk.ac.in/faculty/p-sam-johnson> or <http://sam.nitk.ac.in>

**A Senthil Thilak, Ph.D**

**Areas of Research:** Graph Theory (Pure & Applied), Algorithmic Graph Theory, Wireless networks.  
 Email: thilak@nitk.ac.in, asthilak23@gmail.com  
 Web Page: <http://macs.nitk.ac.in/faculty/senthil-thilak>

**Chandhini G, Ph.D**

**Areas of Research:** Numerical methods – Radial basis function based schemes  
 Email: chandhini@nitk.ac.in  
 Web Page: <http://macs.nitk.ac.in/faculty/chandhini-g>



## Assistant Professors

**Jidesh P, Ph.D**

**Areas of Research:** Mathematical Imaging, Image Processing, Data compression, Graph image processing  
 Email: jidesh@nitk.ac.in, ppjidesh@gmail.com  
 Web Page: <http://macs.nitk.ac.in/faculty/jidesh-p>



**Kedarnath Senapati, Ph.D**

**Areas of Research:** Probability and Stochastic Processes, Blind Signal Deconvolution and Separation, Wavelets and Signal Processing, Complex Dynamics  
 Email: kedar11@gmail.com  
 Web Page: <http://macs.nitk.ac.in/faculty/kedarnath-senapati>



Assistant Professors

	<p style="text-align: right;"><b>Pushparaj Shetty D, Ph.D</b></p> <p><b>Areas of Research:</b> Algorithmic Graph Theory, Algorithms for Wireless Sensor Networks, Computational Molecular Biology          Email: prajshetty@nitk.edu.in, prajshetty@gmail.com          Web Page: <a href="http://macs.nitk.ac.in/faculty/pushparaj-shetty-d">http://macs.nitk.ac.in/faculty/pushparaj-shetty-d</a></p>	
	<p><b>Srinivasa Rao Kola , Ph.D</b></p> <p><b>Areas of Research:</b> Coloring of Graphs          Email: srinu.iitkgp@gmail.com ,srinukola@nitk.ac.in          Web Page: <a href="http://macs.nitk.ac.in/faculty/srinivasa-rao-kola">http://macs.nitk.ac.in/faculty/srinivasa-rao-kola</a></p>	
	<p style="text-align: right;"><b>V. Murugan, Ph.D</b></p> <p><b>Areas of Research:</b> Functional Equations, Fixed Point Theory, Dynamical Systems          Email: mrgniitm@ gmail.com          Web Page: <a href="http://macs.nitk.ac.in/faculty/v-murugan">http://macs.nitk.ac.in/faculty/v-murugan</a></p>	
	<p><b>Vishwanath K. P, Ph.D</b></p> <p><b>Areas of Research:</b> Fluid Dynamics, Mathematical Modelling of Physical Phenomena          Email: vishy@nitk@edu.in, shastryvishwanath@gmail.com          Web Page: <a href="http://macs.nitk.ac.in/faculty/vishwanath-k-p">http://macs.nitk.ac.in/faculty/vishwanath-k-p</a></p>	
	<p style="text-align: right;"><b>Vivek Sinha, Ph.D</b></p> <p><b>Areas of Research:</b> Real Analysis          Email: viveksinha@nitk.ac.in          Web Page <a href="http://macs.nitk.ac.in/faculty/vivek-sinha">http://macs.nitk.ac.in/faculty/vivek-sinha</a></p>	

Non-Teaching Staff	 <p style="text-align: center;">Gangadhara B Assistant Engineer(SG-II)</p>	 <p style="text-align: center;">Satisha Attendant</p>
--------------------	---	--

**Ongoing R&D Projects**

Sl. No	Title of the project	Funding Agency	Amount (Rs in Lakhs)	Principal Investigator
1.	Topological Structures of Semi closed Operators In Hilbert Spaces	SERC, DST	3.20	P. Sam Johnson
2.	A Study on Moore-Penrose Inverse in Krein Spaces	NBHM, DAE	1.85	P. Sam Johnson

## Publications: (Last Five years)

International Journals -162	National Journals - 08	International Conference Proceedings-15
-----------------------------	------------------------	---

## Facilities in the Department

- High End Desktop with i7 processor and 8 GM RAM with dual Boot Operating System Windows 8 and Ubuntu 14.x LTS - 200 Nos.
- Dell Work Station with 8 GB RAM with Dual Operation System - 10 Nos.
- Microprocessor and interface kit for Logic Design Lab - 35 Nos.

## CONTACT INFORMATION

<b>Head of the Department</b> Department of Mathematical and Computational Sciences National Institute of Technology Karnataka, Surathkal Srinivasnagar, Managluru - 575 025, India	Telephone +91-824-247 3048 Telefax +91-824-247 4048 Email hodmacs@nitk.ac.in
--	--