



**GURU NANAK INSTITUTE OF TECHNOLOGY**  
 (An Autonomous Institute affiliated to MAKAUT)



**PROSPECTUS  
2020**

**Accreditations, Affiliations & Approvals**



# MISSION

- To meet the demands for skilled manpower on a global basis in the field of engineering, technology and management
- To inculcate amongst the students and inspire them to take up higher studies and research
- To impart high quality education by providing the ambience needed for developing requisite skill for excellence in education and industry

# VISION

To ignite young minds with creativity and empowering lives and educate them to produce a galaxy of young professionals of outstanding ability who can become leaders in their profession and responsible citizens who can meet the challenges faced by the society.



**1** Project Based Learning

**2** IE (I) , SESI Student Chapter

**3** Employability Training

**4** Technology & Cultural Fests

**5** Co- Curricular Activities, NSS

# PRINCIPAL'S MESSAGE

Guru Nanak Institute of Technology (GNIT) was established in the year 2003 by the Guru Nanak Educational Trust. GNIT is an unit of JIS Group Educational Initiatives, a premier education service provider in West Bengal, having 30 institutions, 25,000 students offering 72 academic programmes. Instituted with a vision to empower aspiring professionals with technological knowledge and professional expertise. This technical campus offering undergraduate and post graduate courses under Maulana Abul Kalam Azad University of Technology (MAKAUT formerly WBUT), approved by NAAC, UGC, NBA, AICTE is located in one of the prime locations in North Kolkata. The institute offers global standard initiatives and innovations undertaken by both the faculty members and the students to enrich and enhance the teaching learning process. This approach equips the students to keep pace with the dynamic evolution of science and technology both in academics and industry. The trend-setting academic endeavors of GNIT have produced some of the finest scholars and ace industry professionals amongst our alumni who have brought fame and laurels for both the institute and themselves.

The Institute is located at the industrial hub of Sodepur, well connected by road and railway and in near proximity to Kolkata International Airport and to Howrah, Sealdah and Kolkata railway stations, which are the gateways to the city of joy. The serene and aesthetically developed campus is highly conducive for quality academic endeavors. The entire campus is smoking free & plastic free to ensure an eco-friendly and pollution free environment. The college has an enrollment of around 2000 students pursuing various degree engineering courses.

I welcome all the students at GNIT wish them a very bright and prospective career.



- ▶ Rashtriya Shiksha Gourav Puroskar from Centre for Education Growth and Research, New Delhi in 2016 .
- ▶ Indira Gandhi Sadbhavna Award from Global Achievers Foundation, New Delhi in 2014
- ▶ Bharat Bibhushan Samman Puraskar from EHRDA, New Delhi in 2013.



- ▶ Fellow of The Institution of Engineering & Technology (FIET), UK since 2012
- ▶ Fellow of The Institute of Electronics & Telecomm Engineers (FIETE) in 2012 .
- ▶ Has been awarded Fellow from Institute of Engineers (FIE), India in 2012
- ▶ Enlisted in the Marquis Who's Who in the World in Science & Engineering in 2012
- ▶ Senior Member of Institute of Electrical and Electronics Engineers (SMIEEE), USA since 2012
- ▶ Senior Member of Computer Society of India (CSI), India since 2010
- ▶ Board Member of West Bengal Joint Entrance Board (WBJEEB) since 2015 .
- ▶ BE(CSE), M.Tech(CSE), PhD(Engg.), MBA(IS)
- ▶ C.Eng(I), FIET(UK), FIEC(USA),
- ▶ FIE, FIETE, SMIEEE(USA)
- ▶ MACM(USA), SMCSI, LMISTE

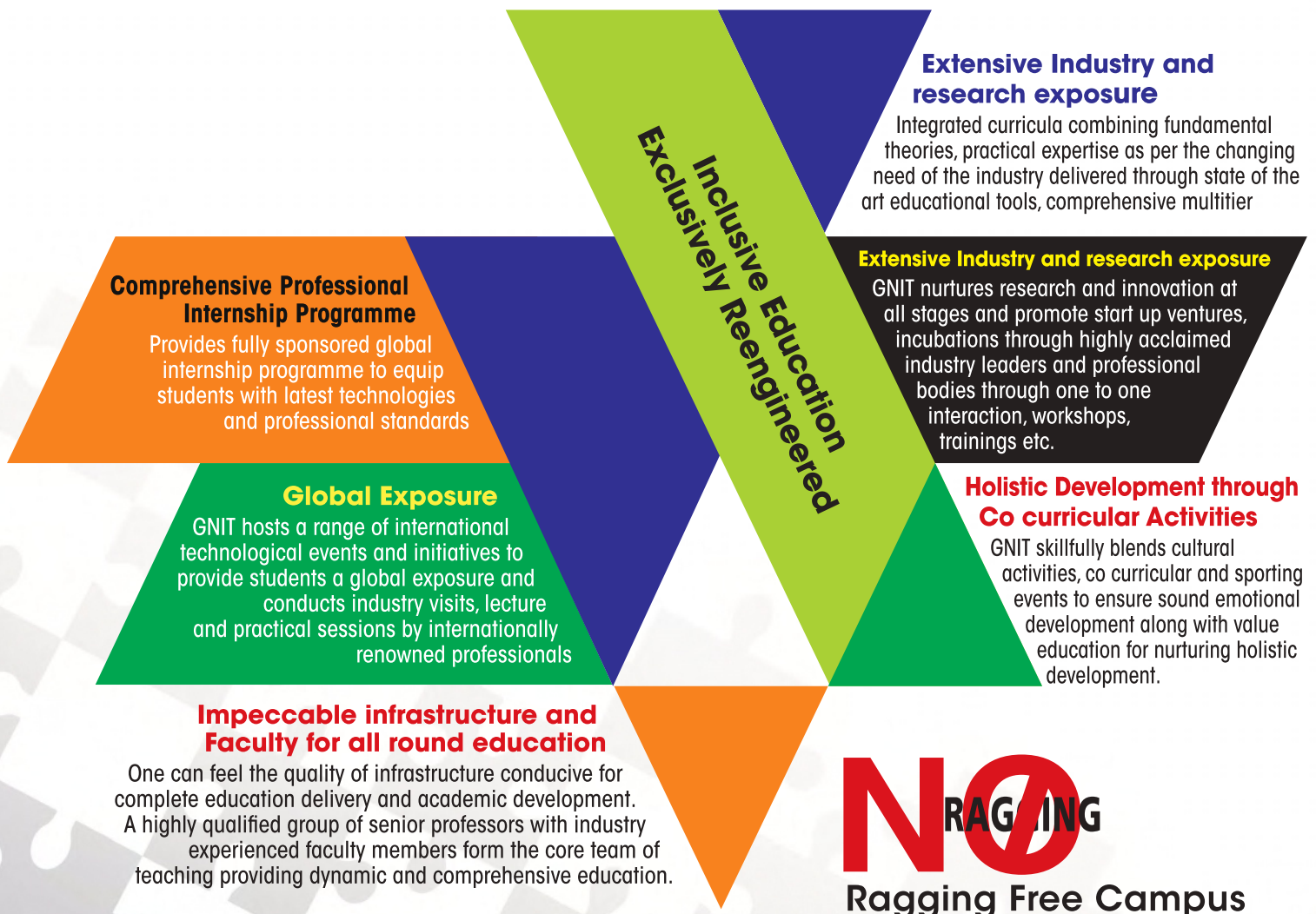
Sincerely

**Prof. (Dr.) Santanu Kr. Sen**  
Principal, GNIT

## Affiliation and Accreditations:

1. First institute in India to receive prestigious QS-IGAUGE Gold Rank.
2. Best Engineering College award from ASSOCHAM
3. Times Engineering Institute Survey and among top 150 colleges in India (i3RC 2020 Survey)
4. Accredited by NAAC (National Assessment and Accreditation Council)
5. Approved by AICTE (All India Council for Technical Education)
6. Affiliated to MAKAUT (formerly known as WBUT)
7. Autonomous Institute status conferred by UGC and Ministry of Higher Education, WB
8. Rated A+ among top Engineering Colleges in West Bengal (Source : Career 360).
9. Affiliated to WBSCT & VE & SD (for Diploma Programmes)

## GNIT: Gateway to a fruitful career



## ADMISSION GUIDELINES

Admission to all courses at GNIT is done through the Admission Cell and it offers one - to - one integrated career counselling to all national and international students and provides initial guidance and assistance on accommodation and hostel facilities, food habits, cross-cultural issues and initial mentoring to help the students to get acquainted with the system, safe secured and growing.

Admission cell provides integrated guidance to parents & students and counsel them, emphasizing on the following

- i) Guidance in the choice of the subject and desires mapped with eligibility.
- ii) Rules and regulation of the college.
- iii) Manners and etiquette.
- iv) Accommodation/ Hostel/ Food Arrangement etc.

**To Book a counselling session log on to [www.gnit.ac.in](http://www.gnit.ac.in) or  
Call at +91 -0-9432012681 / +91 -0-9073683911 or  
Whatsapp at +91 -9432012681**

### Eligibility For Admission

STREAM	Qualifying Entrance Examination	CRITERIA FOR ADMISSION
B.Tech in CSE, IT, ECE, FT, EE & AEIE	WBJEE/JEE Main/ CEE-AMPAL	HS or Equivalent
Diploma in Electronics and Tele Communication Engineering & Diploma in Electrical Engineering	JEXPO (Conducted by WBSCTE)	The applicant must be an Indian Citizen whose minimum age is 15 years, Passed Madhyamik or its equivalent examination with minimum 35% marks.
MCA	WBJECA/CEE-AMPAL	50% marks in graduation in any stream with Mathematics / Statistics / Computer Science as one of the subjects from any Recognized University in India / BCA
M.Tech in Mobile Communication and Network Technology (ECE)	GATE/PGET (Conducted by WBUT)/CEE-AMPAL	60% marks in B.Tech/ B.E/ AMIE degree holders in CSE, IT, MCA can apply
M.Tec in Computer Science and Engineering (CSE)	GATE/PGET (Conducted by WBUT)/CEE-AMPAL	60% marks in B.Tech/ B.E/ AMIE degree holders in CSE, IT, MCA can apply

# International & National Events at GNIT



## Associated With



AIT, Bangkok



ECAM LYON, School of Engineering, France



BCCI



Ministry of MSME, Govt. of India



IE (I)



MSME



Confederation of Indian Industry

CII



INFOSYS



ISTE



NASSCOM

# Department of Computer Science & Engineering

Pioneering Intelligent Technology to Connect the World

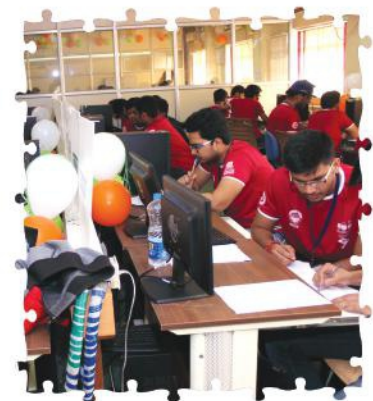
Department of Computer Science and Engineering has positioned itself as a robust unit to facilitate learning and skill enhancement, augmenting bright career opportunities, innovations and techno- commercial applications. It blends theory and practice with realistic hands on skills to equip graduates meeting the industry needs and mentor professionals for the industry in line with Government of India's mission to bridge the digital divide, smart E Governance and harnessing the potential of data analytics and ICT for a bright, congenial and secured nation.

**The CSE Department provides Technological Leadership and Facilities as the Host Center of the internationally most prestigious computer coding event ACM ICPC.**



**acm** International Collegiate  
Programming Contest

**IBM** | event  
sponsor



## Degree Offered

### 4 Years Bachelor in Technology

The programme combines diverse frontiers of computer science and trains in integration and design of hardware and software application in large scale software systems with a focus on security and intelligent system requirements and provides comprehensive expertise on the industrial practices and projects.

Intake Capacity: 120 students

2 Years M.Tech in Computer Science & Engineering

Intake Capacity: 9 students

### Career Opportunity

- Software Development
- Android System Development
- Integration Jobs
- Handling Big Data, Financial and Banking
- Database Management & Data Analytics
- Management of Enterprise Network & Cyber Security
- Multimedia and Animations, Digital Gaming

### Specialized Facilities

1. Dynamic Programming Environment and Competitive Coding
2. Ai and Machine Learning
3. Cyber Security and Cloud Computing
4. Data Science and Big Data
5. Web and Android Development

## DISTINGUISHED ALUMNI



### Debadeep Pharikal

Working as Enterprise Architect at Ford Motor Co.USA

GNIT provides the best professors, courses and college experiences and produces innovative leaders. My experience at this institution allowed for academic and personal growth, which has embedded quite a zealous spirit within me, especially in regard to the achievement of my future aspirations in IT sector.



### Sagnik Dutta

Working in Amazon.com and a leading TeesHood-a successful entrepreneurial venture.



### Bipasha Banerjee

Working as Programmer Analyst at Thomson Reuters

GNIT provides its students with a plethora of opportunities. It has large campus, good infrastructure and plenty of study materials equipped to support academic growth.



# Department of Electronics & Communications Engineering

**Embedding Skills at Global Standards**

Department of Electronics and Communications Engineering provide a competence driven learning at par with the highly demanding and dynamic career in industry and research. The impeccably mapped curriculum with career requirements and practical project oriented teaching has made the programme a seat of integrated learning. The research orientation and fostering innovations bring out the talent in creative designs of equipments and developing hands on expertise.

## **Degree Offered**

4 Years Bachelor in Technology

Intake For B.Tech: 120 students

2 years M.Tech in Mobile Communication and  
Networking Technology

Intake For M.Tech: 9 students

3 years Diploma in Electronics and Telecommunication Engineering (affiliated by WBSCT & VE & SD)

Intake Capacity 60 students



## Career Opportunity

Telecommunications, Intelligent Systems and Control Engineering

Embedded Technology, VLSI and Robotics

Electronics Component, IC Design and Manufacturing

Computer Engineering, Digital Media Processing

## Specialized Facilities

A wide range of application oriented competencies with core specializations in VLSI & Microelectronics, Communication, Image processing & Neural Network and Embedded system are delivered through curriculum including a strong self-study component and mini projects at all levels so as to develop the students' independent analytical abilities. Opportunity for innovation and incubation is provided at this stage to successful projects by the institute for industrial standards. ECE department promotes active cross functional collaborative research in areas like robotics, human computer interface, SMART sensor etc. Vigorous exposure in Software Simulation environment (MATLAB, Ansoft HFSS, ORIGIN Tanner EDA Tools, FPGA Intellisuite, COMSOL, VISSIM etc.) accelerate learning and competence development.

## Specialized Laboratory

- Analog/Digital Communication
- Advance Communication
- Basic Electronics
- MicrowavelAntenna
- VLSI & Microelectronics / DSP
- Analog Electronics
- Digital Electronics

## DISTINGUISHED ALUMNI



**Sayan Sen Gupta**

Working at  
Oracle DBA Systems Engineer  
Tata Consultancy Services



**Samadrita Bhattacharjee**

Working at  
Amazon, India



# Department of Food Technology

**Technology to one of the Biggest Economies in the world**

Food Technology is a multidisciplinary field of engineering, applied physical sciences & microbiology. Food processing industry is one of the largest industry in India and is ranked 5th in terms of production, consumption and export. It generates consistently huge employment opportunities in food processing, industries handling products of fruits and vegetables, dairy, meat, poultry, fishery, consumer's foods, grains, alcoholic drinks, aerated water, soft drinks, spices etc.

### **Key Attributes:**

- i) To apply food science and technology in manufacturing, processing and preservation for better distributional efficiency and tangible marketing of the food products.
- ii) To accelerate the process of consumer multiplication in the societies of developed and developing countries and to contribute to the growth of food processing.
- ii) To produce high caliber technology graduates to support the rapid changes in food industries and sustain the industrial and economic development.
- iii) To develop ability to use modern techniques, skills and engineering tools necessary in Food Technology in global context.



One of the prestigious MOFPI  
Funded specialized Laboratory  
in the Country



## Degree Offered

### 4 Years Bachelor in Technology

A multidisciplinary programme of significant social and economic importance and catering wide range of highly rewarding career opportunities consistently through the years. It is an ideal launch pad for R&D Career and Higher Studies at International Levels.

Intake Capacity: 60 students.

## Career Opportunity

Food Processing

Dairy Technology`

Manufacturing of alcoholic drinks, aerated water, soft drinks.

Meat, Poultry, Fishery

Industries handling products of Fruits and

Vegetables, Consumer's Foods, Grains, Spices etc

## Specialized Facilities

Food Microbiology

Food Processing Technology

Unit Operations

Food Analysis and Quality Control

Chemistry of Food

Bio Chemistry

Microbial Technology

R & D Lab



### Ms Medha Pal

Gold Medalist for securing 1st position in B.Tech, FT Course from His Excellency Chancellor of MAKAUT, the Governor of West Bengal.



"My UG journey with FT Department was memorable. Being mentored by extraordinary faculties and getting world class research and practical experience was very essential foundation for future."

### Mr. Debjit Ghosh

International Business Development Manager and Private Public Partnership Project manager Donlimon, Hamburg, Germany

# Department of Electronics & Computer Science Engineering

**Engaging Technology Enriching Life and Transforming Economy**

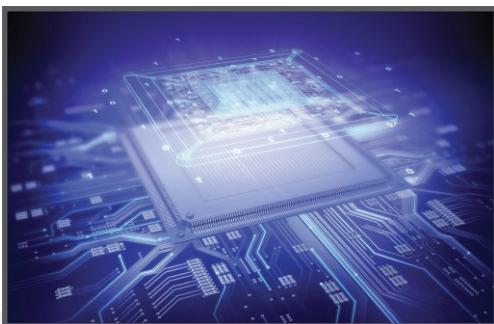
This course provides the perfect balance of best of both worlds – Software driven by hardware which makes the transition to the world of job opportunities feel seamless.

The graduates from this course will be well equipped with the essential technical knowledge in both the fields of hardware and software, which in turn will widen the scope of job as well as research.

Apart from fundamentals of Electronics, ECSE graduates get an exposure to build smart systems that involve sensors, processors, actuators, communication networks and IoT. The students will also get to work in the domains of data science and data analytics.

This program will give exposure to advanced level knowledge in the design of complex software enabled electronic and microelectronic hardware systems.

Being an Electronics and Computer Science Engineering one gets to solve technical problems and develop products which lead to an overall intellectual development.



## Degree Offered

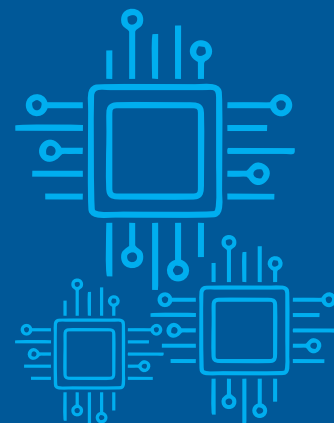
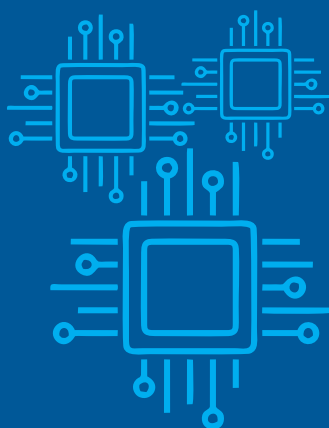
### 4 Years Bachelor in Technology

- This field offers job opportunities, industry growth and good pay-packages as compared to all other branches.
- Placement opportunities in all the major sectors like software industries, core industries and communication industries.
- Modern and upcoming technology with opportunities for placement all over India.
- Wide scope of pursuing higher studies particularly for M.E / M. Tech / MS in India and abroad.

**Intake Capacity : 30 students**

### Career Opportunity

- **Public Sector Units:** National Thermal Power Corporation (NTPC), Steel Authority of India Ltd. (SAIL), Indian Oil Corporation (IOC), Steel Authority of India Limited (SAIL), Oil and Natural Gas Corporation (ONGC), Gas Authority of India Ltd. (GAIL), Bharat Sanchar Nigam Limited (BSNL) etc.
- **Private Sector Units (hardware/automation):** Reliance Industries, Tata Steel, Honeywell Automation, Texas Instruments, ABB, Larsen & Toubro, Robert Bosch, Johnson Control, Tata Motors, National Instruments etc.
- **Private Sector Units (software/IT):** Tata Consultancy Services (TCS), Cognizant Technology Solutions (CTS), International Business Machine (IBM), Infosys, Wipro, Accenture, Capgemini, Price Water House Coopers (PWC), RS Software etc.



### Departmental Infrastructure

- The Department is enriched with PhD Qualified faculty & Industry Experienced Faculty Members with 15+ years of experience.
- Technical Assistants with 12+ years of experience.
- There are 6 state-of-art laboratories with all modern facilities and high-end computers.

# Department of Electrical Engineering

**Empowering Lives through Enriching Education**

Department of Electrical Engineering aims to provide advance education in engineering that is relevant to electrical power generation, transmission, distribution and its utilization. Electrical engineering is a broad field of engineering which deals with the science and technology involving electricity, electronics, and electromagnetism, to design, construct, and maintain products, services, and information systems. Electrical engineering is the historical parent of what is now called electrical, electronics, and computer engineering.



**Electrical Machines Lab**



**Measurement Lab**

## 4 Years Bachelor Degree in Technology

Intake Capacity: 120 students

## 3 years Diploma in Electrical Engineering (affiliated by WBSCT & VE & SD)

Intake Capacity: 60 students

Electrical Engineering is one of the most exciting branches in the world. It lies at the very core of all infrastructure-building as well as developmental processes. The course provides an in-depth knowledge and competence into an interesting arena of power generation, transmission, distribution, utilization and mathematical analysis of all such systems.

### Career Opportunity

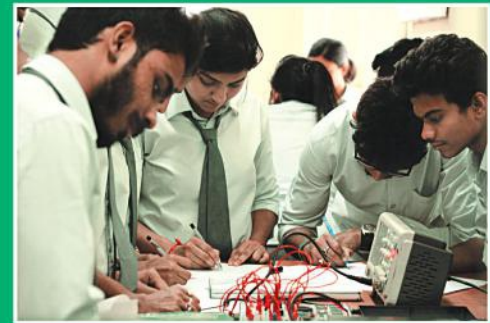
- Power Generation and Control Engineering
- Power Transmission and Distribution
- Design and Manufacturing of Electrical Machines
- Device Design and Manufacturing
- Sustainable and Renewable Energy
- Services and Maintenance Industry
- Design and Implementation of Electrical Projects and Intelligent Systems

### Domain of Specialization

- Power Electronics
- Electrical Machines
- Control System
- Measurement & Instrumentation
- Basic Electrical Engineering
- Power System, Power Transmission and Distribution
- Electric Drives
- Solar and Other Renewable Energy
- Testing of equipments and Application
- Software Pspice, Matlab, Multisim, My
- Power, Autocad, Etap and Pscad etc.



Project Based Learning Class



Practical Class

### ALUMNI SPEAK



"I will never forget the 4 years that I spent in GNIT. The colourful fests.... Thank you GNIT for providing me with such a great infrastructure and amazing faculty who helped me throughout my tenure. And not to forget Placement Cell who gave me such a wonderful and great opportunity."

**Abdulla Mamun**

Hexatech International W.L.L Doha, Qatar



# Department of Information Technology

**Spearheading Smart technology and Expanding Opportunity**

The Department of Information Technology serves to integrate the benefit of Engineering, Science and Technology with National priorities and business opportunities. The department nurtures research and innovation and transform talents into IT professionals. The department is renowned for its quality education, placement, discipline and very good learning environment for the students. The department has an impeccable track record of producing brilliant alumni over the years who are performing creditably well with corporate giants like Infosys, TCS, Capgemini, Amazon, ITC, Cognizant, TechMahindra, Wipro, Tally, Accenture etc. A good percentage of students have gone for higher studies in reputed institutes of USA, Europe and India. The aim of the department is to enable students to acquire specialized technological skills, scientific knowledge, as well as to provide a basis for their personal, social and cognitive development.

**The Technical Backbone of the Biggest Digital  
Movement in the world, Smart India Hackathon at GNIT  
Nodal Center (2017, 2018) Organized by MHRD,  
Government of India, AICTE**



## Courses Offered:

4 years B.Tech course in Information Technology - 60 seats.

### Career Opportunity:

- IT Consultancy.
- Cloud Computing & Architecture.
- Computer Forensic Investigator.
- Android App Developer.
- Web Developer.
- Software Engineering.
- Cyber Security.
- Artificial Intelligence & Machine Learning.
- Data Scientist.
- Multimedia & Game Developer.

## GNIT Nodal Center, Smart India Hackathon Grand Finale



### DISTINGUISHED ALUMNI



**Akash Podder**

Amazon Development centre India, 2016



**Sayantani Neogi**

Digital Forensic Analyst, Data 64

# Department of Computer Applications

Engaging Technology in an Integrated Globe

The Department of Computer Application is devoted to impart industry oriented study and research of computer science at graduate and post-graduate levels. The department has the track record of producing several batches of young, trained and talented individuals who have made their mark in software like Tata Consultancy Services (TCS), Wipro, Cognizant(CTS), Infosys, ITC Infotech, Capgemini BiskFarm, WBSEB and many more. The students are employed in the sectors like coding, testing, data base designing, data base administration, network administration, web designing, cyber security, project management etc. Also the students have done well in higher academics in India and abroad

The combination of competent and vibrant faculty members, modern infrastructure and state-of-the-art technical resources give an edge to the young technocrats. Dedicated Labs, equipped Library, Technical and Communication skills grooming along with regular industry exposure and interaction with various disciplines of GNIT are important value additions & others Sectors Like

## Courses Offered:

Master of Computer Applications (MCA) : 3 years full time course - Intake 60 seats



## Area of Specialization:

Advanced Computing  
Big Data  
Cloud Computing  
Cyber Security

## Career Prospects

Artificial Intelligence and Soft Computing  
Internet of Things (IOT)  
Cyber Security and Cryptography  
Big Data with HADOOP  
System Administration with Linux  
Mobile Commerce & Cyber Law  
Cloud Computing  
Mobile Application Development using Android  
Multimedia Applications in Graphics and Animation



Advanced Computing Lab



Internet and Web Design Lab

## DISTINGUISHED ALUMNI



### Sandip Sah

MCA 2007-2010 Batch  
**Employed at**  
Module Lead at Mindtree Ltd.



### Avishek Saha

MCA 2008-2011 Batch  
**Employed at**  
Asst. Program Manager at  
Govt. of West Bengal



### Saikat Debnath

MCA 2009-2012 Batch  
**Employed at**  
Executive at West Bengal  
State Electricity Distribution .Co. Ltd  
(WBSEDCL)



## Some Companies who recruited our Students



## GURUNANAK INSTITUTE OF TECHNOLOGY

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**CAREER COUNSELING AND ADMISSION HELP LINE**

📞 Call at +91 9432012681/ +91 9073683911 or

📱 Whatsapp at +91 9432012681

