

# ST. THOMAS' COLLEGE OF ENGINEERING & TECHNOLOGY



# **BRIEF HISTORY/BACKGROUND**

In a bid to supplement the efforts of the West Bengal Government College and the All India Council for Technical Education (AICTE) in expanding the infrastructure of technical education in this region it was contemplated in 2000 to establish an Engineering College for the benefit of students in West Bengal and also in the region. To give the idea a shape, St. Thomas' College of Engineering & Technology was established with the intention to impart quality technical education to the students and imbibe confidence into the young talents graduating from the institution to stand up to the challenges of life with confidence. To ensure this, a plan was made so that it could become a seat of excellence in due course of time. Based on this preamble, St. Thomas' College of Engineering & Technology at 4, Diamond Harbour Road, Kidderpore, Kolkata 700023, West Bengal came into being on 29th August 2000.

The college is affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal, formerly known as West Bengal University of Technology (WBUT).

The college is approved by All India Council for Technical Education (AICTE).

Computer Science & Engineering (CSE), Information Technology (IT), Electronics & Communication Engineering (ECE) and Electrical Engineering (EE) are **NBA** accredited

"B.Tech. in Artificial Intelligence and Machine Learning", "M. Tech in Artificial Intelligence and Data Science" and "M. Tech in Internet of Things" were started in 2021. All the courses are approved by AICTE and affiliated to (MAKAUT)

# MESSAGE FROM THE DIRECTOR'S DESK



In its 21st year, St. Thomas' College of Engineering & Technology is continuing to inspire and offer rewarding career to all its students through their overall development and growth.

The college ensures the students' abilities to be nurtured in the hands of highly qualified and dedicated team of faculty members for promising and exciting future. We develop the talents and skills to its full potential.

The education here though technical yet is a perfect blend of 'knowledge' and 'values', 'theory' and 'practice'. The personal and community development is the highest goal of this institute. The college is open for all aspiring students who are willing to see themselves successful in this era of globalization.

Dr. Subir Chowdhury Director (Academic)



In the past two decades since its inception, St. Thomas' College of Engineering & Technology has established a reputation of being a seat of learning. Here students get excellent support to learn and develop skills to implement their knowledge to become leaders in later life. Our alumni are well placed in the industry and a substantial number of students are established as teachers both in India and abroad.

Throughout this journey we have focused on discipline as a major area of thrust since inception. Attendance is strictly observed and students are encouraged to learn both in classrooms and laboratories. Personal development is also closely monitored and students are provided counselling to decide on their career options. Apart from academics, students are encouraged to take up social causes. There are ample opportunities to take part in sports and games for all round development. We welcome all those who will be joining us in the coming academic session.

## MESSAGE FROM THE PRINCIPAL'S DESK

St. Thomas' College of Engineering & Technology believes in holistic development of an individual to become a responsible human being fully aware of its surroundings.

Training with the best possible education in the corner-stone of this institution. We sincerely believe that this institution will show the students the right path towards the bright future.



Dr. Sailes Mukhopadhay Founder Principal



At St. Thomas' College of Engineering & Technology we focus on all round development of students. They are encouraged to take part in various academic and co-curricular activities round the year. We teach students to be tolerant and respectful to different languages and cultures. Students are prepared to face technological challenges in life. Our effort is to empower students through value-based learning and adhering to ethical and moral values.

Dr. Shila Ghosh Principal

# **INSTITUTE VISION-MISSION**

#### **Vision of the Institute:**

To evolve as an industry oriented, research-based Institution for creative solutions in various engineering domains, with an ultimate objective of meeting technological challenges faced by the nation and the society.

#### **Mission of the Institute:**

To enhance the quality of engineering education and delivery through accessible, comprehensive and research-oriented teaching-learning-assessment processes in the state-of-art environment.

To create opportunities for students and faculty members to acquire professional knowledge and develop managerial, entrepreneurial and social attitudes with highly ethical and moral values.

To satisfy the ever-changing needs of the nation with respect to evolution and absorption of sustainable and environment friendly technologies for effective creation of knowledge-based society in the global era.

## **DEPARTMENTS AND INTAKE CAPACITY**

The college is offering five UG and two PG programmes. The UG programmes of CSE, IT, ECE and EE are NBA accredited. "B.Tech. in Artificial Intelligence and Machine Learning" "M. Tech in Artificial Intelligence and Data Science" and "M. Tech in Internet of Things" were started in 2021. All courses are approved by AICTE and affiliated to MAKAUT.

UNDERGRADUATE PROGRAMME	ESTABLISHED YEAR	INTAKE	DURATION
Computer Science & Engineering (CSE)	2000	120	4 Years
Artificial Intelligence and Machine Learning (AIML)	2021	60	4 Years
Information Technology (IT)	2020	60	4 Years
Electronics & Communication Engineering (ECE)	2000	60	4 Years
Electrical Engineering (EE)	2000	60	4 Years
Artificial Intelligence and Data Science	2021	30	2 Years

POSTGRADUATE PROGRAMME	ESTABLISHED YEAR	INTAKE	DURATION
Artificial Intelligence and Data Science	2021	30	2 Years
Internet of Things	2021	30	2 Years

The intake is 60 students in each stream. The admission is through **West Bengal Joint Entrance Examination (WBJEE 2022)** and **JEE Mains- 2022** examination and subject to rules and norms as framed by the West Bengal Government and All India Council for Technical Education.

#### **FEES**

The fees will be as decided by the Fee Structure Committee and the Government of West Bengal. Semester fees are payable in June and December of every year. Late payment will attract a fine of Rs.300/- per calendar month or part thereof. For non-payment beyond three months, concerned student's name will be struck off from the rolls and readmission will have to be sought subject to permission of the college. Main banker of the college is State Bank of India, Kidderpore branch. The bank will collect fees after the college endorses the filled-in fee book.

#### **COLLEGE DRESS**

The college has uniform for students. The dress for Boys is grey trousers and sky-blue shirts with black leather shoes. Navy blue ties have to be worn only on special occasions. For girls too, uniform of similar colour combination is compulsory.

However, they will have the option of wearing any of the following dress combinations-Saree/blouse, salwar/kameez with dupatta or trousers/shirt. Saree/blouse combination will not be allowed for workshop/laboratory activities. Slippers/Sandals without backstrap or without covered toes and high heeled footwear are not allowed. Students will not be allowed to attend college/library or use any of the college facilities without being attired in proper dress. For workshop and laboratory classes, wearing navy blue apron is compulsory for both boys and girls. Before procuring the uniform, students are advised to contact the college office first.

#### **COLLEGE TIMING**

Classes are held between 9:30 A.M to 5:30 P.M from Monday to Friday. There is a short-break of 15 minutes and a long-break of 45 minutes for lunch. Saturday is also a working day with staggered hours and can be utilized for seminars, lectures & group activities. Participation in these programmes is compulsory. However, for administrative reasons, the management of the college can alter the timing at short notice.

# NOTABLE STUDENT ACHIEVEMENTS & RECOGNITIONS

#### **Academic Accomplishments**

NAME	DEPARTMENT	YEAR	UNIVERSITY RANK
Swapnanil Gupta	Electronics & Communication Engineering	2019	lst
Diksha Saha	Information Technology	2019	2nd
Nikita Shah	Computer Science & Engineering	2019	3rd
Prachi Nigania	Computer Science & Engineering	2018	lst
Shohan Mahalanobish	Electrical Engineering	2017	lst
Avirup Ghosh	Electrical Engineering	2017	2nd
Nicole Belinda Dillen	Computer Science & Engineering	2017	2nd
Soumini Pyne	Computer Science & Engineering	2017	3rd
Emily Mukherjee	Information Technology	2017	3rd

\*2020, 2021 University Convocation has not yet taken place

## **Achievements in Projects**

- Arquam Ejaz (Information Technology): "Spring Popup Hackathon 2022", Second Prize, USD 2500
- Aousnik Gupta, Rudrajit Choudhuri (Computer Science Engineering), Best Paper Awards at Confetence held at IIT, Ropar.
- 'Alphabet Learning', currently being used at Autism Society of West Bengal.
- Rakteem-A Blood Donors' Alert System approved by federation of Indian blood donor organization
- Jayashree Banerjee, Anwesha Datta (Computer Science & Engineering): Best project award in Project Competition by CTS.

## **Alumni Entrepreneurship**

- Sampriti Bhattacharya: Hydroswarm, Boston, USA.
- Vikas Gupta: Human Fractal, Bengaluru, India.
- Mohit Hada: Technid Solution, Kolkata, India.
- Enayatul Haque: INA Internet Pvt. Ltd., Kolkata, India.
- Aritro Banerjee and Aditya Roy: Apsolutio Technologies Pvt. Ltd., Kolkata, India
- Noumaan Arif: Nullstack Technologies Pvt. Ltd., Kolkata, India
- Arghya Sadhukan: Adben Industries Pvt Ltd., Kolkata, India

# LIST OF STUDENTS ADMITTED IN IIT, IISC, NIT AND IIM

- Kaimadam Antony Shejin (Computer Science & Engineering) IIT Guwahati (GATE 2022)
- Arya Bhattacharjee (Computer Science & Engineering) IIM, INDORE (CAT 2022).
- Sagnik Basu (Computer Science & Engineering) IIT Kharagpur (GATE 2022)
- Upasana Mondal (Computer Science & Engineering) IIT Kharagpur (GATE 2021)
- Soumi Chatterjee (Computer Science & Engineering) IIT Kharagpur (GATE 2021)
- Aniruddha Mithra (Electrical Engineering) NIT Bhopal (GATE 2020)
- Rajashri Roy Choudhury (Electrical Engineering) NIT Trichy (L&T M.Tech Programme-2020)
- Soumyajit Chakraborty (Electrical Engineering) IIT Madras (GATE 2021)
- Aritra Nandy (Computer Science & Engineering)-IIT Kanpur (GATE 2020).
- Debanjan Chatterjee (Computer Science & Engineering)-IIT Kanpur (GATE 2020).
- Debasish Samanta (Electrical Engineering)-IIM Sirmaur, (CAT 2020).
- Abhay Raj- (Electrical Engineering)-NIT Calicut, (GATE 2020).
- Samrat Kundu (Electronics & Communication Engineering)-IISC (GATE 2019).
- Samrat Dutta (Computer Science & Engineering) -IIT Bombay (GATE 2019).
- Md Rehan (Electrical Engineering) -IIT Madras (GATE 2019).
- Abhiraj Prasad (Electrical Engineering)-IIT Roorkee (GATE 2019).
- Ananya Das (Computer Science & Engineering)- IIM Ranchi (CAT 2018).
- Anand Kalwar (Electrical Engineering)- IISC (GATE 2018).
- Sk. Mainul Islam (Computer Science & Engineering) IIT Kharagpur (GATE 2018)
- Tamoghna Hazra (Computer Science & Engineering)- IIT Guwahati (GATE 2018).
- Rudranil Bhowmik (Information Technology) IIT Kanpur (GATE 2018).

\*12 Students qualified in GATE 2022

#### LIST OF STUDENTS ADMITTED IN FOREIGN UNIVERSITIES

## **Computer Science & Engineering**

- Madhurima Ghosh, University of Stuttgart, Germany
- Drishti Agarwal, University of Florida, USA
- Rudrajit Chaudhury, Oregon State University, USA
- Meghanto Majumdar, Oregon State University, USA
- Aritra Kundu: Worcester Polytechnic Institute, USA.
- Amreeta Chatterjee: Oregon State University, USA
- Nicole Belinda Dillen: University of Waterloo, Canada
- Ayan Hore: University of Grenoble, France.
- Ritam Ganguly: IOWA State University, USA.
- Oyendrilla Dobe: IOWA State University, USA.
- Shreya Das: King's College London, London.
- Chirav Dave: Arizona State University, USA.

## **Information Technology**

- Ankit Aich: Rochester Institute of Technology, USA.
- Torsha Majumdar: University of Texas, USA.
- Enayatul Haque, University of Münster, Germany.
- Rohan Bhattacharya: University of Kaiserslautern, Germany.
- Sharmistha Bhattacharya: RWTH Aachen University, Germany.

#### **Electrical Engineering**

- Souramko Mukherjee, Skema Business School, Paris, France
- Ankush Mukherjee: University of Stuttgart, Germany.
- Saptarsshi Mukherjee: University of Applied Sciences Darmstadt, Germany.
- Sayandeep Sen: University of Houston, USA.
- Sounak Biswas: University of Calgary, Canada.
- Prayati dutta: Virginia Polytechnic Institute & State University, USA.

#### **Electronics and Communication Engineering**

- Srijita Sanyal, FAU Erlangen-Nuremberg, Germany
- Ankita Ghosh: University of Calgary, Canada.
- Satyaki Chatterjee: University of FAU Erlangen-Nurnberg, Germany.
- Debadreeto Bhattacharaya: Technical University Dresden, Germany.
- Sabarna Choudhury: University of Minnesota, USA.
- Shreyasi Bandyopadhyay: University of Minnesota, USA.
- Souvik De: University of Colorado Boulder, USA.
- Rudrendu Mahindar: University of Southern California, USA.
- Sankhadeep Dutta: University of Texas, Dallas.
- Pooja Basak: FAU Erlangen Nuremberg, Germany.
- Asif Islam: Technical University of Ilmenau, Germany

## LIST OF FEW DISTINGUISHED ALUMNI

DEPARTMENT	NAME	DESIGNATION	ORGANIZATION
Information Technology	Dr. Pradipto	Assistant	Indian Institute of
	Biswas	Professor	Science, Bangalore
Computer Science &	Dr. Swapnoneel	Assistant	School of Computing,
Engineering	Roy	Professor	University of Florida
Electronics & Communication	Dr. Ayan	Research	School of Clinical Medicine
Engineering	Sengupta	Associate	University of Cambridge
Computer Science &	Dr. Parantapa	Researcher	Rakuten Institute of
Engineering	Goswami		Technology, France
Electronics & Communication	Dr. Sourav	Postdoctral	Southern University of
Engineering	Roy	Research Fellow	Science & Technology, China
Electronics & Communication Engineering	Dr. Soumya Kanti Dutta	Research Engineer	Eurecom- Communication System, France: Co- Founder: Future Tech Lab
Electronics & Communication	Dr. Kallol	Industry	Enterprise Application
Engineering	Basu	Partner	Services at TCS, UK
Electrical Engineering	Dr. Samapriti Bhattacharya	Founder	Founder- Hydroswarm
Computer Science & Engineering	Vikas Gupta	Entrepreneur	Human fractal
Electrical Engineering	Dr. Anusna Chakraborty	Research Assistant	University of Cincinnati

**Student Centric Policy**: Provision for scholarship as per the government's directive and selection as per the discretion of the Director.

10

## **FACULTY INFORMATION**

- 1. Prof. (Dr.) Sujit Kumar Biswas: Dean (Academics) and HoD of Electrical Engineering.
- 2. Mousami Dutt: HoD of Computer Science & Engineering.
- 3. Dr. Prasun Chowdhury: HoD of Electronics & Communication Engineering.
- 4. Dr. Arindam Chakraborty: HoD of Information Technology.
- 5. Dr. Mousumi Dutt: HoD of Artificial Intelligence & Machine Learning.

The HoDs are assisted by a team of 56 qualified teachers out of which 23 are PHD Qualified and rest are Post Graduates.

# **PLACEMENT**

Total Students Eligible	No. of offers	Maximum CTC
236	277	10,68,000.00
233	398	1,12,00,000.00
219	322	47,50,000.00
229	304	10,00,000.00
	236 233 219	236 277 233 398 219 322

# **RECRUITERS**











POWERED POSSIBILITIES

# CURRICULUM & TEACHING-LEARNING PROCESS-IMPLEMENTATION

#### Lesson planning by Teachers using different Course Delivery Methods

- e learning facility with dedicated digital platform for students.
- e-evaluation System
- Lectures, Tutorials.
- Presentations (PPT and Videos).
- Experimental Laboratory Work and Virtual lab work
- Group tasks (Projects, GDs).
- Hand-outs, Web resources.
- Collaborative & independent learning.

#### Methodologies to support slow learners and to encourage bright students

- Counselling/ Mentoring system Cell available.
- Every faculty counsel 15-20 students every week.
- Remedial and Laboratory classes are conducted.
- Encouragement for student to participate in seminars and involve in research work.
- Encouragement to take up mini projects.

## **FACILITIES**

#### **Common Facilities:**

#### **Computer Centre for Students**





A Central Computer Centre with seventy odd terminals is exclusively available to the students for their use of internet and intranet facility during and after college hour. Internet and intranet access are provided through wired and wireless connections backed by high end servers. Back-up servers are available for worst case conditions. Students use the terminals for internet surfing, downloading of study materials, e-journals, project materials, problem solving, and programming practice etc.

#### **Smart Class Rooms**

All the classrooms are equipped with modern teaching aids.





#### **Playground**

Football Ground and Cricket Ground 100m x 60 m: Badminton Court 13.4 m x 6.1 m.





## **Open Air Stage**

Open air stage for cultural events.



#### **Common Room for Boys and Girls**

The Common Room is a place which provides a place of interaction amongst the students of the college. Boys' common room is equipped with 2 Table Tennis and 2 Carrom Boards whereas the girls' common room is equipped with 1 Table Tennis and 1 Carrom Board. The Common Room is open for the students from 11:30 a.m. to 8 p.m. on week days and from 11.30 a.m. till 5 p.m. on Saturday.



#### Canteen

The college canteen is available for the students throughout the day. The students have a variety of dishes to choose from like Chinese, South Indian, Bengali etc. Snacks are also available for the students. The canteen has 8 staff who can serve approximately 50 students simultaneously.



#### **Digital Library and Information Centre**

The Central Library and Information Centre has a rich collection of Books along with Print Journals, Technical Magazines and Periodicals. The central library also subscribes IEEE e-journal package. The e-journals of the Central Library can be accessed throughout the campus as it is IP based. The Central Library subscribes dailies like the Telegraph, The Statesman, Times of India, The Indian Express, Asian Age and Employment News.



#### **Internet and Intranet**

The Institution has two dedicated Internet Connections. The college has a computer centre where students may use internet facility after college hours as well.

All computers are LAN connected.

## **Industrial Training**

The students undergo either summer or winter internship programme to gain a hands-on experience and deal with real life problems.



### **Companies**

GE Motors, WBSETCL, WBSEDCL, CESC, Durgapur Thermal Power, Bhillai Steel Plant, South Eastern Railway, DVC, PRASAR BHARATI, AIRPORT AUTHORITY OF INDIA, Levcon Controls Private limited, N.F. RAILWAY, Tech Clusters Pvt. Ltd., Dirac Business Solutions, XFactor Digital.

#### **Career Counselling Industry Professional and Academician**



### Different Cells and Clubs for Student's Participation

#### **NSS**

- Street play was conducted depicting domestic violence and gender Discrimination against women by Electrical Engineering Department.
- 5 students from 2nd and 3rd year participated in the "Swachhathon 1.0" where the attempted to solve certain societal problems with technological solutions.
- Female students of the college were sensitized about the need for self-defence.
- "Vigilance Awareness Week" and Sardar Ballav Bhai Patel's birth anniversary was celebrated with an anti-corruption programme.
- Students participated in various training programmes where they work for the underprivileged sections of the society.





### **Research & Professional Development Cell**

- Lectures on emerging topics.
- Arranging FDP.
- Organizing seminar / conference / workshops.
- Promoting in-house research.
- Promoting professional society memberships & activities.



## **Entrepreneur Development Cell**



- Guest Lectures.
- Skill development programmes.
- Industry visits.
- Business plan competition.

#### **Sports & Games Cell**

#### **Notable activities**

 Boys Football Tournament Champion: Girls Hardware vs Software Football

• Inter Departmental Badminton Tournament

• Inter Departmental Table Tennis Tournament

 Boys Cricket Tournament Champion: Girls Hardware Vs Software Cricket

Annual Sports



#### **Art & Culture Cell**

- Ananya Laha, came state first at West Bengal State in "Heartfulness Essay Event-2020" organized by United Nations Information Centre for India and Bhutan
- The 1st year students secured the 2nd position in the annual fest, 2018 of St. Xaviers' College, Kolkata for their band performance.
- The college band performed in the finals of RHAPSO-DY, Calcutta Medical College Fest.
- Photography Competition
- Folk Studio- annual singing competition.
- INQUIZTIVE- annual quiz competition









## Anti Ragging Cell

Ragging is strictly prohibited and to facilitate this there is one anti-ragging cell with active participation of the teachers and students.

