

# Maulana Abul Kalam Azad University of Technology, West Bengal

NH-12 (Old NH-34), Simhat, Haringhata, Nadia -741249 http://www.makautwb.ac.in/



# Message from Head of the Department



**Dr. Somdatta Chakravortty** 

A team of well qualified faculty that keeps their knowledge up to date by attending conferences and workshops on a regular basis is a major asset of the department.

With rapidly evolving technology and the need continuous for innovation, the Department has always produced quality professionals, holding important positions Information Technology and other Industries in India and abroad.

The Department molds young outstanding engineers who are academically strong in both theory and practical. The department is constantly producing good results in University.

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http://it.makautwb.ac.in

# INFORMATION TECHNOLOGY

# **Vision**

To envision itself in the top tier departments of the country that will be recognized for its technological advancement in teaching, learning, research and innovation and serve to address evolving global needs.

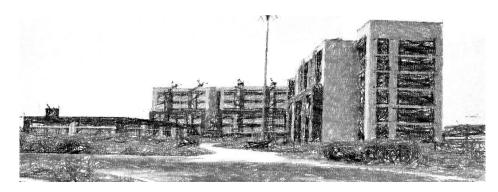


Figure 1: Hostel & Canteen

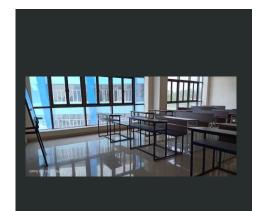
# **Mission**

- To give quality education to future leaders for contribution to the professional workforce in engineering and technology.
- Promote interdisciplinary research and innovation in emerging areas of technology convergence.
- To prepare learners with leadership qualities, team-spirit and ethical responsibilities with a positive contribution to the society.

# **Program Educational Objectives**

Program Educational Objectives (PEOs) of the Programs in Information Technology have been established through a continuous consultation and feedback process:

- 1. To make a mark as a technocrat in profession and/or in higher education in Information Technology by acquiring sound knowledge in mathematical, computational and technological skills.
- 2. The ability to analyze real life technical issues and to design adept computing systems having economic viability and social acceptability
- 3. To be able to adapt to the changing trends in the industry, exhibit ethics, good communication skills and team work in profession.



### **About the Department**

In line with the vision of the department and to meet the global demand on cutting edge technologies, the Department of Information Technology of this University has initiated in-house courses on specialized technologies in its Haringhata Campus. The Department already runs a B.Tech Program in Information Technology since 2001 and M.Tech Program in Information Technology since 2005.

#### Curriculum

The Academic Syllabi have been designed with the inclusion of most advanced and modern concepts in all the engineering disciplines covered by the University making the curriculum highly relevant both nationally and internationally.

#### **Industry-Academia interaction**

It is a regular practice of the University to invite Industry experts who are also invited to deliver lectures and share experiences of industry. Academicians from institutions of repute are invited to deliver extension lectures for students as well as faculties to encourage their research aptitude. The Department houses courses in collaboration with renowned industry partners to increase the skills and employability of the young generation.

#### **Teaching Learning Process**

The Department carries out its teaching-learning process in Smart Class rooms and makes use of modern methods of teaching that are in vogue (lectures supported by teaching aids, computer projection, demonstration, live modelling, peer tutoring, collaborative learning, flipped learning, and the use of learning management system are being regularly practiced). The campus is fully WiFi enabled and the Departments encourages its faculty members to use Virtual Labs in practical sessions to expose the students in cutting edge and / emerging subjects through these labs.

The Department has introduced problem and project based learning in its classes where students are asked to work on Case Studies for application of their theoretical knowledge. Workshop based learning is being given importance that includes hands-on training sessions and project based demonstrations on the latest cutting edge technologies. Practical applications have been demonstrated in workshops on Cybersecurity, Machine Learning, Data Science etc. Students demonstrate their analysing power and creativity by participating in Hackathons, other competitions in which they exhibit their innovations,

and work on live projects of the University, Industry and externally funded projects.

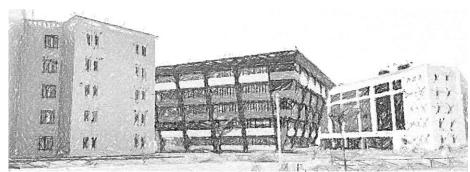


Figure 2: University Academic Building

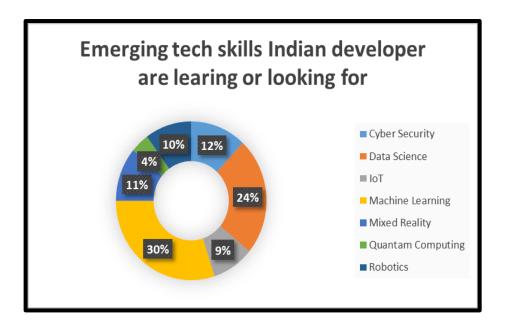
# **Programs Offered**

Undergraduate Courses:

• B. Tech. in Information Technology

Post Graduate Courses:

• M.Tech in Information Technology



# **Admission Procedure**

#### Eligibility of Admission to B. Tech:

- Candidates having Engineering 'Merit Rank' in WBJEE
- Candidates must pass Higher Secondary (10+2) Examination of West Bengal Council of Higher Secondary Education or equivalent examination from a recognized Council/Board in regular class mode with
  - I. Individual pass marks in Physics, Chemistry and Mathematics as compulsory subjects and
  - II. Minimum of 45% marks in the above subjects taken together (40% for SC / ST / PwD / OBC-A / OBC-B Candidates) in the said qualifying examination.

# Eligibility of Admission to M.Tech:

- Valid PGET (Post Graduate Entrance Test conducted by MAKAUT, WB) score card and B.Tech. Pass marks.
- GATE qualified candidates are given preference

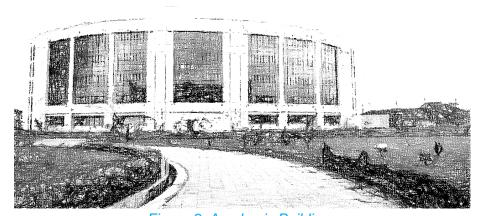


Figure 3: Academic Building

# **Intake for courses**

B. Tech Course: 60 M. Tech Course: 30

# **Course Fees**

For detail course fees visit: <a href="https://makautwb.ac.in/page.php?id=220">https://makautwb.ac.in/page.php?id=220</a>



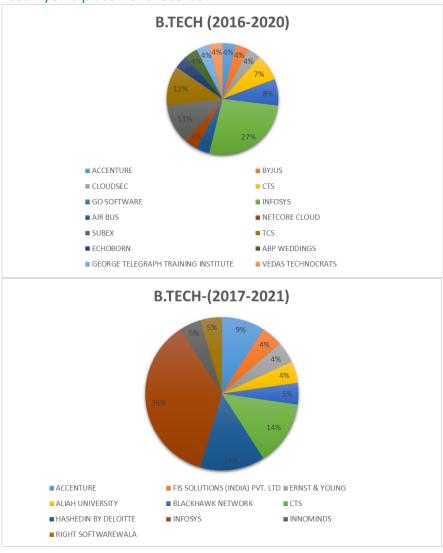
# **Placement Opportunities**

Companies in which our alumni are currently placed:

- **INFOSYS**
- Tata Consultancy Services
- Cognizant Technology Solutions
- Wipro
- Oracle
- Google

and many more...

#### Last 2 years placement records:



"Tell me and I forget. Teach me and I remember. Involve me and I learn." — Benjamin Franklin

#### **B.** Tech. in Information Technology

B. Tech. Information Technology or B. Tech (IT) is an undergraduate academic degree offered in India which focuses mainly on computers and technology. This course refers to the application of technology to solve business processes. Management of computers is important rather than computation. IT plays an important role in the future of upcoming technology. IT consists of programming, software administration, hardware administration, networking and network security.

# Program Educational Objectives (PEOs) of B. Tech in IT:

- **PEO 1:** To make a mark as a technocrat in profession and/or in higher education in Information Technology by acquiring sound knowledge in mathematical, computational and technological skills.
- **PEO 2:** The ability to analyze real life technical issues and to design adept computing systems having economic viability and social acceptability
- **PEO 3:** To be able to adapt to the changing trends in the industry, exhibit ethics, good communication skills and team work in profession.

#### Identified Program Specific Outcome (PSO) of B. Tech in IT

- **PSO 1:** Ability to plan and design information systems to standard specifications using efficient algorithms in the relevant programming language(s)
- **PSO 2:** Ability to use knowledge in diverse domains to recognize research gaps and thus to offer solutions to innovative ideas.

#### **Features:**

B. Tech in Information Technology course enabling a candidate to become professionals in the subject.

#### **Skills Developed:**

- Computer Hardware and Software
- Digital marketing
- Cloud computing
- Mobile computing
- Big data analysis

#### **Course Outcome:**

The students will develop the knowledge about the general dynamics involved in the field. Knowledge of mathematics, science and computing in the core information technologies, design, and analyse complex computer systems and implement and interpret the results from those systems will also build up. Students having the ability of technical knowledge for planning, initiating and evaluating the data along with implementing the necessary information are considered beneficial criteria for the program.

#### Job prospect:

Information technology jobs are in high demand. Information technology has entered and benefited all sectors of industry. IT professionals design, support, and maintain computer hardware and software for various industrial and individual applications and are much sought after for their expertise and experience. The National Association of Software and Service Companies has predicted a 12 percent increase in Indian software exports in 2015-16 to \$112 billion. Probably, the only, or at least the

biggest, hurdle in the country achieving this growth rate is the shortage of skilled and competent IT professionals.

- Applications programmer
- Project manager (IT)
- Database administrator
- IT business analyst
- Software quality assurance & testing
- Information security officer
- Software trainer
- M. Tech and PhD in different technical field i.e. Information Technology, Computer Science and Engineering etc.

#### M. Tech. in Information Technology

M. Tech. Information Technology or M. Tech (IT) is a postgraduate academic degree which focuses mainly on computers and technology. The course is designed in a manner that students can excel and specialize according to their interests. The delivery method of the program includes lectures from experienced faculties and guest lectures from experts. Industrial internship or academic research is a mandatory part of the program, in which every student has to participate in order to complete the M. Tech (IT). The experience gained during the course can prove to be highly useful for the students at the time of recruitment.

#### **Features:**

M. Tech in Information Technology course enabling a candidate to become professionals in the subject.

#### **Skills Developed:**

- Digital marketing
- Cloud computing
- Mobile computing
- Big data analysis

#### **Course Outcome:**

The students will develop the knowledge about the general dynamics involved in the field. Knowledge of mathematics, science and computing in the core information technologies, design, and analyse complex computer systems and implement and interpret the results from those systems will also build up. Students having the ability of technical knowledge for planning, initiating and evaluating the data along with implementing the necessary information are considered beneficial criteria for the program.

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- IT business analyst
- Software quality assurance & testing
- Information security officer
- Software trainer
- Lecturer in academic institutions
- PhD in different technical field i.e. Information Technology, Computer Science and Engineering etc.

#### **Our Faculty Members**









The department has a team of highly experienced and motivated faculty members who are in process of tuning the young minds to make them globally competitive. The strength of the department is highly motivated students who understand the dynamics of the industry and upgrade their skills accordingly. The scope of Information Technology is endless. The students of Information Technology are highly demanded by the recruiters of the top companies. Depending upon the interest of the student, he/she may choose to go for higher studies or if employed can choose to do research, development, design, production, application, testing or management in the Information Technology industry. In our department we not only give emphasis on study but also apply our knowledge in understanding what computers are, what is its architecture, how to efficiently program them, different tools to write an effective algorithm, the interface between the computer and the user, the computer graphics, computer networking, managing the software database, software engineering and testing them efficiently and more. Through innovative teaching-learning process a teamwork approach and leadership building experience, our students gain vital communication and critical-thinking skills. Our institution provides a platform for the students to enhance their employability skills through Industry Institute Collaboration.





























