

# Modi Institute of Technology, Kota

An Engg. College Approved by AICTE & Affiliated to RTU  
Branches: **B.Tech-** ME / EE / ECE / CSE / AI & DS & **M.Tech** – Digital Communication  
Nayagaon, Rawatbhata Road, P.O. Borabas, Kota – 324010; Tel.:7665439788;  
Website: [www.mitkota.com](http://www.mitkota.com) Email: [mitkota1@gmail.com](mailto:mitkota1@gmail.com)

## Department of Computer Science and Engineering

### Introduction

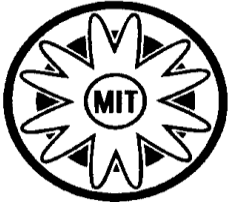
### **Programs Offered: Bachelor of Technology in Computer Science and Engineering (UG)-4 Years (8 Semester Course)**

Computer Science and Engineering deals with information and computation. Its approach to computation and associated applications is regarded to be practical and scientific. The discipline is considered by many to be a foundation science one which makes other facts and successes a reality. The study of computer science includes the systematic study of algorithms in order to obtain, represent, process, store, communicate and access information from a wide variety of springs.

Computer Science and Engineering is committed to build the most conducive environment for quality academic and research-based graduate engineering education. The curriculum is blended with core and elective technologies. The core technology strengthens the rigorous foundation to make the budding engineers, technically competent, while a varied option of most recent electives ensures that they are abreast with the latest technical innovations and growth to get specialized in respective areas of futuristic technologies of their interest. For this purpose, the CSE Department of MIT Kota concerns Machine Learning, Cloud Computing, and Big Data, Cyber and Network Security, etc.

### Best Practices

- 1. Lecture Delivery System:** Faculties used traditional way of teaching using blackboard/white board as well as upgraded versions of teaching using overhead projector through power point presentation and video lectures. Online teaching is also used via Google meet and Zoom platform.
- 2. Peer Tutoring:** Tutorial classes for all students and remedial classes for the slow learner students are also be handled by the faculty members
- 3. Online Courses:** Students as well as faculties are motivated to participate in online courses from ATAL, Swayam, NPTEL and Internshala and Coursera platforms. Course selection can be based on curriculum, values, ethics, skill development, communication skills etc.



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- 4. Project Assistance:** As a part of curriculum, department provides exposure to the students to work on projects with team effort. It enables them to apply the technical skills they have gained and expand their abilities in analysis-based innovation and engineering judgment. As their projects take form, student teams enable to write formal documentation and make presentations of their work under the guidance of their faculty mentors.
- 5. Industry Mentorship:** Various expert lectures, student workshop and industrial visits are provided to students to ready them for industrial requirement, updated with current technology and future trends. Experts of various field domain from various industries help the students with their guest lectures, workshops and student training program. They are usually called / invited as reviewer for providing their ideas for innovations and reviewing their projects work etc
- 6. Skill Development:** For the overall development of students, department conducted various activities like quiz competition, essay writing, debate, extempore, mock interviews, role play etc. Students can participate in cultural activities and NSS held in college.

## Eligibility

The minimum eligibility criteria to take admission in B.Tech. 1<sup>st</sup> Year in CSE branch is that the students must pass class 12<sup>th</sup> with Physics, Chemistry and Mathematics subjects with at least aggregate 45% marks for GEN / OBC / SBC category and 40% aggregate marks for SC / ST students from a recognized school / Board or students may take the admission in B.Tech. 2<sup>nd</sup> (III Semester) in CSE branch directly if he will be pass out student of 3 years Polytechnic Diploma Course from recognized Technical Board for which the same percentage criteria as mentioned is considered.

**Examination Scheme:** Semester wise

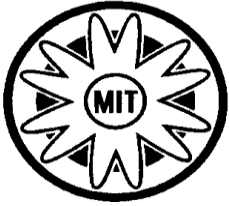
**Duration of the Course:** Four Year

## Admission

As this is the affiliating Institute, the following admission processes followed by RTU Kota are as follows:

REAP (Rajasthan Engineering Admission Process) for Admission in B.Tech. 1<sup>st</sup> Year onwards.

LEEP (Lateral Entry in Engineering Program for Admission in B.Tech. 2<sup>nd</sup> year onwards.



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CAM (Centralized Admission for M.Tech.) for admission in Digital Communication.

## Job Opportunities

Computer Science and Engineering is integral to modern life, So you're likely to find your computer science skills in high demand across many different industries. These include financial organizations, management consultancy firms, software houses, communications companies, data warehouses, multinational companies, governmental agencies, universities and hospitals, etc.

## Career Options for Students after Completing Engineering in Computer Science and Engineering

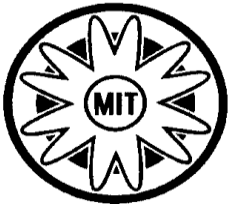
- Software Developer.
- Database Administrator.
- Computer Hardware Engineer.
- Computer Systems Analyst.
- Computer Network Architect.
- Web Developer.
- Project Manager.
- Computer Science Blogger and many more

## Laboratories

A computer lab is a space which provides computer services to a defined community.

### Software Engineering Lab

The Software Engineering Lab is aimed to provide you hands-on experience with different aspects of Software Engineering and UML including requirements identification, DFD, behavioral and structural design using UML diagrams, implementation, testing, and so on.



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## Database Management Lab

Database Lab Engine is an open-source tool for building powerful development and testing environments based on thin cloning of Postgre SQL databases. This can become a game-changer in your development and testing workflow, improving time-to-market, and reducing costs of your non-production

## Data Structure Lab

Data Structures laboratory is spatial and well equipped with the latest systems. It provides a wide approach in C programming and enables to apply knowledge in Artificial Intelligence. Guidance's are provided to the students by a team of faculty experts and lab programmer.

## Operating System and Simulation Lab

Operating Systems Lab introduce the concepts of operating systems, designing principles of operating systems and implementation of operating systems.

## Computer Programming Lab

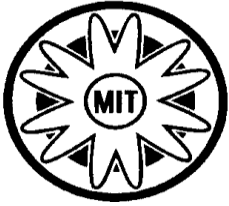
Computer programming is the process that professionals use to write code that instructs how a computer, application or software program performs. At its most basic, computer programming is a set of instructions to facilitate specific actions.

## UNIX Shell Programming Lab

When you login to a UNIX system, a program called a shell process is run for you. A shell process is a command interpreter that provides you with an interface to the operating system. A shell script is just a file of commands, normally executed by a shell process that was spawned to run the script.

## Java Programming Lab

A Java Programming lab is intended to provide a basic knowledge of java programming for students. The course helps the students to solve the interdisciplinary applications through java programming.



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## Design and Analysis of Algorithm Lab

An Algorithm is a sequence of steps to solve a problem. Design and Analysis of Algorithm is very important for designing algorithm to solve different types of problems in the branch of computer science and information technology.

## Compiler Designing Lab

The objective of the Compiler Design Laboratory is to understand and implement the principles, techniques, and also available tools used in compiler construction process. This will enable the students to work in the development phase of new computer languages in industry.

## Computer Graphics Lab

This is an introductory course on principles of computer graphics. We will consider both 2D and 3D graphics. Computer graphics is a sub-field of computer science which studies methods for digitally synthesizing and manipulating visual content. Although the term often refers to the study of three-dimensional computer graphics, it also encompasses two-dimensional graphics and image processing.

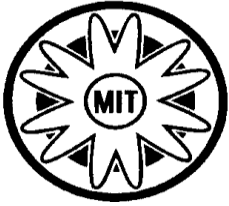
## Research Scope

Research in this area ranges from theoretical underpinnings to practical tools supporting today's ambitious software projects. Topics of particular attention include: programming language design, software performance, and concurrency, as well as program analysis, synthesis, verification and testing.

## Activities

The following activities have been conducted in MIT Kota:

- In-House Training Programme on 3D- Printing Collaboration with SIAT, Kota from 2 July-15 July 2019)
- Occasion of Guru Purnima on 16-07-2019
- Induction Programme for First Year Students on 17 August 2019
- “Degree Distribution Ceremony” on 19 August 2019
- “Plantation” At MIT on 22 August 2019
- International Seminar on “Soft Skills” on 30 August 2019
- Seminar Conducted By “Red Hat Academy” on 3 September 2019



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- Radio City 91.1 Fm Had Organized an Activity for Finding The Samsung Young Innovators Contest on 18 September 2019
- Shri Vishwakarma Jayanti Celebrated At MIT on 17 September 2019
- “Dandiya Function” on 1 Oct 2019
- Technorion Zonal Workshop on “Robotics” By Industrial Hub Technology in Association with IIT Bombay on 03 Oct 2019
- Workshop on MATLAB by Softcon India Pvt. Ltd. on 11 Oct 2019
- Three Days Entrepreneurship Awareness Camp on 14 Oct 2019
- Pool Campus Placement Drive by Jaro Education on 17 & 18 October, 2019
- Saras Dairy Plant Visit by R K Sansthan on 21 Oct 2019
- “Constitution Day” on 26 Nov 2019
- Rajasthan Innovation & Startup Expo (‘Rise’) Organized By Depart of It&C, Govt of Rajasthan At MNIT, Jaipur on 19 December 2019
- Interactive Session for “Ms/Mrs. & Mr. Glamour Rajasthan 2020” on 30 Jan 2020
- One Day Seminar on “Industrial Applications of Cad/Cam” on 18 Feb 2020
- “Thar 2020” Organized By RTU, Kota Robotics Show on 1 March 2020
- Sports & Cultural Week from 2 March to 6 March 2020
- A Cheque Of Rs 2,50,000/- To Hon’ Ble Collector Sh. Om Kasera Ji Against The Pandemic Situation Arising Due To Corona For Food And Other Neccessities Of Needy People On 25 March 2020
- Live Launch Of “Artificial Intelligence & Data Science” on Tuesday, 30 June-2020
- “Talk with Youth By Heroes of MIT” on 5 July 2020
- Plantation on International Girl Children’s Day, 12 Oct 2020
- “Corona Jagruk Reilly Mask Distribution Program “Organized By The Joint Venture Of Modi Institute Of Technology, Kota And Municipal Corporation, Kota On 19 Oct 2020
- “Dipawali Milan Samaraoh” on 12 Nov 2020
- “Online Induction Program – 2020” on 5 Dec 2020
- Go Cart Designed By MIT Students
- Expert Lecture On “Maintenance Engineering” In Mechanical Department At MIT, Kota On 6 Jan 2021



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- “Pre Placement Talk” By Dr. Ruchika Dave of Reliable Soft Technologies Pvt Ltd at MIT, Kota on 29, January, 2021
- Five Day Workshop on “Emerging Technology in Industrial Automation” From 1 Feb-5 Feb 2021
- Six Days Workshop on “SELP” From 12 March-17 March 2021
- Covid-19 Vaccination Camp Held on 10th April 2021
- One Day Webinar on “Heart Rate Variability and Applications” on 11 May 2021
- One Day Webinar on “AWS Cloud Services” on 22 May 2021
- One Day Webinar on “Advanced Technology In Automobile And E-Vehicles” on 05 June 2021
- One Day Online Webinar on “Project Management & Customer Support” on 19th June, 2021,
- MIT Kota has organized a Live Yoga Class/Demo on International Yoga Day (21 June 2021).
- MIT Kota has organized a Five Days National Online Workshop on “Present Scenario and Recent Trends in Engineering and Technologies” Phase-1 (PSRT, February-2022) from 1<sup>st</sup> February, 2022 to 5<sup>th</sup> February, 2022.
- MIT Kota, Evershine Honda and HMSI have organized a three days workshop and hands-on training on “Road Safety Activities” from 14<sup>th</sup> December 2022 to 16<sup>th</sup> December 2022.
- MIT Kota and SCRS have organized a two days Scopus Indexed International Conference on “Control, Robotics and Mechatronics” (CRM-2023) with Springer as publication partner from 25<sup>th</sup> to 26<sup>th</sup> March, 2023.
- MIT Kota has organized a “Intercollege Poster Presentation Competition” on March 25, 2023 . The Theme of Competition is “Engineering, Science, Management and Law”.
- MIT Kota and Bureau of Indian Standards (BIS) Jaipur Branch have organized a “Standard Writing Competition” on 31<sup>st</sup> July, 2023.
- MIT Kota has organized 15 Days In-House Training and Hands on on “ Web Designing: Understanding a Journey from Static To Dynamic Web” from August 18, 2023 to 5 September, 2023.
- MIT Kota has organized the “Orientation Day” on September 8, 2023 for the New Commers Students.
- MIT Kota Has organized the 21 Days Induction Program For New Commer Students of First Year on September 8-28, 2023