

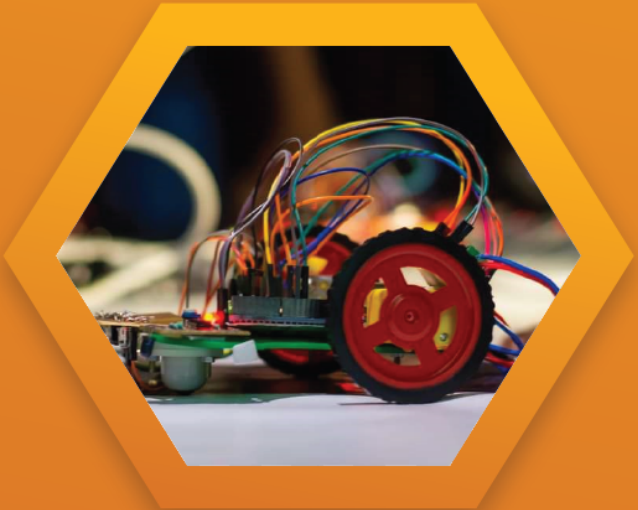
A COLLABORATION OF ASTROWING MNNIT AND TSAW.

Tigyaśā

BUILDING ON IMAGINATION



RISE AND PROGRAM



ABOUT US

Robotics Club MNNIT is a diverse group of robotics enthusiasts from all the college departments, which runs under the umbrella of the Student Activity Centre of MNNIT Allahabad.

Established in 2016, we are mainly concerned with building robots for academic purposes, competing at national events, or even building just out of imagination. This puts us in frequent contact with a plethora of software, hardware, and technologies, like Computer Vision, Simulation Softwares (Gazebo, Pybullet, etc.), CAD Softwares, ROS, devising algorithms, path planning, Machine Learning, Microcontrollers, Kinematics to name just a few of many. Since its creation, this club has seen the completion of hundreds of projects, participated and won accolades in multiple national-level events, and organized various workshops with a decent footfall.

Working closely with the industries, our people regularly acquire lucrative tech giants packages, internships in IITs, and various tech companies.

Our club has also been the birthplace of a startup TSAW in the drone sector, gaining ground in the field and as a company.

We have a team of friendly experts equipped with all kinds of tutorials and workshops along with a compelling workspace to make you an integral part of this rapidly expanding world.

Jigyasa

“Tell me and I forget, teach me and I may remember, involve me and I learn.”

-Benjamin Franklin

Jigyasa is the workshop venture of the Technical clubs of MNNIT, namely Robotics, Aeroclub, and Astrowing, in collaboration with TSAW, a fully functional drone startup that emerged from our clubs. We are motivated by the desire to supplement education with the present-day industry requirements, making the participants future-ready with their skills and a problem-solving mindset.

The workshops under Jigyasa comprise various projects, activities, and interactive sessions, which will help you understand the most difficult concepts in the most comfortable manner. Hence, by emphasizing innovation and imagination, these workshops will instill in your minds a profound scientific temperament and fascination towards technology.



OVERVIEW

"I chose a lazy person to do a hard job. Because a lazy person will find an easy way to do it"

-- Bill Gates

Simply put, programming is the art of interacting with machines. Programming is ubiquitous in our rapidly advancing, technologically equipped lives, and is being used everywhere -- from banks to self driving cars, from mobile apps to aeroplanes.

But no machine can do anything unless it is programmed to do so. With this workshop, we shall help you appreciate the beauty of programming and gain a thorough knowledge of the basics of programming.

Prerequisites:

None

Target Audience:

Class 8th-12th

WORKSHOP SCHEDULE

DAY 1:

- Introduction to programming?
- Why should you learn to program ?
- What can you do with a code?
- How a Code is implemented by a Computer
- What is a programming language?
- Programming in Everyday Life-From Washing Machine to Rockets
- Introduction to Scratch

DAY 3:

- Introduction to App Development
- Introduction to MIT app inventor
- Making your 1st app
- Playing bit more with your codes and apps
- Introduction to Python
- Platforms where you can practice programming
- Some other programming languages and their specifications
- Projects you can do with lessons learnt in the workshop
- How to develop on skills gained: Projects and Resources

DAY 2:

- Basic Programming in Scratch
- Turning Logic in your head into code
- Writing your first program
- Diving Deeper into programming
- Making a calculator with your code
- Introduction to Arduino
- Making Traffic lights with code in TinkerCAD

OUR OTHER WORKSHOPS

ASTRONOMY

- Beginner's walkthrough of Astronomy
- Diving Deeper into the Cosmos
- Astronomy from an Engineer's Perspective
- Establishing an Astronomy Club

AEROSPACE

- Introduction to Flight
- A peek into the Aerospace Sector
- Getting Started with Drones
- Drone Automation
- Establishing an Aeroclub in your College
- First step to Aerodynamics with OpenVSP, F360 and Ansys

GENERAL

- Rise and Program
- Think3D: Fundamental of 3D Modelling and 3D Printing
- Learn3D: Introduction to CAD and 3D Printing

ROBOTICS

- Kickstart your journey into Robotics
- Introduction to Artificial Intelligence
- Introduction to Kinematics in Robotics using PyBullet
- Kit-up to Set-up: To Establish a Robotics Club
- Build your own Robot
- Introduction to Simulation Software in Robotics
- Stepping into Electronics and Arduino
- Introduction to Computer Vision with Raspberry Pi
- Introduction to Autonomous Vehicles with CARLA and Imitation Learning
- Internet of Things (IoT)

CONTACT US

 +91-9530849651 / +91-6393125739

 roboticsclub@mnnit.ac.in

 <http://roboticsclub.mnnit.ac.in/>