

Company Message and Vision

Dear Sir/Madam, Greetings,

Science, as we all know is a subject which is universal and knows no boundaries. We at Vigyan Pathshala believe that science can never be taught theoretically. It always needs practical demonstration through simple experiments and projects to make it more interesting and meaningful. Science is all around us in our daily living and the more we experiment with science and observe, the more fascinated we become in finding answers.

The benefits of learning science through experiments are that children do not just understand the concept but also implement them practically, clearing and testing their ideas independently. We endeavor to provide student with a high quality, skill oriented technologies, with an emphasis on educating the students, fostering their imagination, and creativity, while preparing them for innovative learning."

#### **Robotics**

Man made mechanical devices that can move by themselves, whose motion must be modeled, planned, sensed, actuated and controlled and whose motion behavior can be influenced by programming. Scientifically, robotics is a mix of many engineering disciplines like mechanical engineering, electrical engineering, electronics and computer science that deals with the design, construction, operation, and application of robots, as well as computer systems for their control, sensory feedback, and information processing.

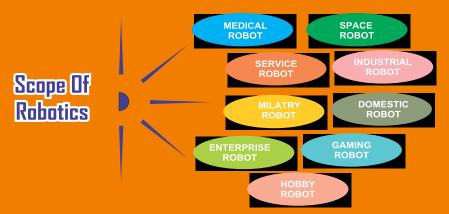
In spite of having a lot of potential and scope, the field of Robotics has not been penetrated in our education system in India. With change in technology, the future of Robotics can take centre stage in various field like Industries, Military, Services, Medical and Space.

#### Why is Robotics important for students?

Robotics is a truly multi-disciplinary field which combines mechanical, electrical, electronics and programming domain of science. It is ideal for young students because it exposes them to hands on application of maths, science and engineering concepts. In addition, Robotics motivates children understand how things work and encourages them to use their creativity and imagination skill during designing robots.

#### What will students gain from joining Robotics?

Robotic aims at 'experiencing science and technology through fun way of learning Robotics'. Working towards this aim, the participants will be taught to design, build and program robots. In the processes of learning, a student will experience practical aspects of science and technology and develop numerous skills including problem solving, logical reasoning, creativity, communication and self confidence.



R abotics Workshop Conducted by





Workshop at Ramswaroop



Summer Camp at DPS Gomtinagar



Workshop at Shri Ram Memorial



Workshop at Town Hall



Workshop at CMS Gomtinagar



Workshop at CMS Mahanagar



Workshop at CMS Rajendranagar



Workshop at La Martiniere College Lucknow



Workshop at CMS Gomtinagar

Yearly Course Curriculum Conducted by





**Millennium School, Lucknow** 



Aatmdeep Vidyalaya, Gorakhpur



Savitri Public School Partawal/Buradih



Seth M.R. Jaipuriya Lucknow



Millennium School Sitapur Road, Lucknow



B.K. Public School Bhagirathpur



**Central Academy, Basti** 

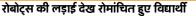


Star Hybrid School Taramandal & Rajendra Nagar



Awadh Girls Inter College Sant Kabir Nagar

#### बांठडल तां बर्बित्रईतीहतू तब्पूर्छाण





गोरखपुर। आत्मदीप विद्यालय में विज्ञान प्रदर्शनी और रोबोटिक्स पर आधारित प्रतियोगिता का आयोजन शनिवार को हुआ। इस दौरान विभिन्न विद्यालयों के विद्यार्थियों को ओर से तैयार किए गए रोबोट्स की लडाई आकर्षण का केंद्र रही। इसमें 35 प्रतिभागियों ने हिरसा लिया। प्रबंधक राज्ये

संकर्षण त्रिपाठी ने बच्चों में छिपी प्रतिभा को पहचानकर उन्हें निखारने को आवश्यकता पर विशेष बल देने की बात कही। उप प्रधानाचार्य अमित श्रीवास्तव ्प्तिथियों का स्वागत किया। संचालन विवेक त्रिपाठी ने किया। व्यूरो

Robotics Competition @ Aatmdeep Vidyalaya, Gorakhpur





Robotics Lab Setup @ Awadh Girls Inter College, Sant Kabir Nagar

## Yearly Course Curriculum

CLASS V- SCIENCE	CLASS VI- SCIENCE	CLASS VII- SCIENCE
Rocket science	Static electricity	How things change/ react with one another
Filling balloon with chemical gas	Density concept	Filling balloon with chemical gas
Substances depending on light	Water surface tension	Electricity & circuits
Measuring of mass	Static charge	Floating pencil
Anything occupy space	Electricity	Wind mill
State of matter	Volcano project	Homo polar motor
Skelton system	Shimmering Soap Bubbles	Boyle's law
Area volume	Measuring of mass	Magnetism with electricity
Human body parts	Study of Matter	Static electricity
Teeth model	Simple Machine	Straw waves
CLASS V- TECHNOLOGY	CLASS VI- TECHNOLOGY	CLASS VII- TECHNOLOGY
Tools description	1. Tools description	1. Tools description
How to blink LED	2. How to blink LED	2. How to blink LED
Pencil is conducting materials	3. Insect robot	3. Power Bank
Mixer grinder	4. Paper circuit	4. Steady hand
Air cooler	5. Infinity well	5. Dancing LED
Understanding the circuit	6. Understanding the circuit	6. Understanding the circuit
	7. Basic Robotics	7. Basic Robotics

"Don't take rest after your first victory because if you fail in second more lips are waiting to say that your first victory was just luck"

-Dr. A.P.J. Abdul Kalam

## Yearly Course Curriculum

CLASS VIII- SCIENCE	CLASS <del>I</del> X- SCIENCE	CLASS X- SCIENCE
Newton's 3rd law	Faraday's Discovery	Force
Bending of light	Concept of convergent lens/projector	Laws of motion
Centre of mass	Field of electromagnetism	Substances depending on light
Electric circuit puzzle	How resistance effect LED intensity	Gravitational
Refractive index	Fleming's left hand rule application	Eddy current brake
Mirror application	Speaker	Work & energy
Kaleido scope	Refraction of light	Sound
Water salt battery	Conduction	Bimetallic Alarm
Jumping coil	Project on trigonometry	Meglev train
Pinhole Camera	Sensor	Faraday's Discovery
CLASS VIII- TECHNOLOGY	CLASS IX- TECHNOLOGY	CLASS X- TECHNOLOGY
Tools description	Tools description	Tools description
How to blink LED	How to blink LED	How to blink LED
Understanding the circuit	Understanding the circuit	Understanding the circuit
Mini water pump	Touch switch	Switches and motor working
Electric motor concept	U.S.B. LED	Basic Robotics
Shock Pen	Basic Robotics	Concept of relay
Basic Robotics		

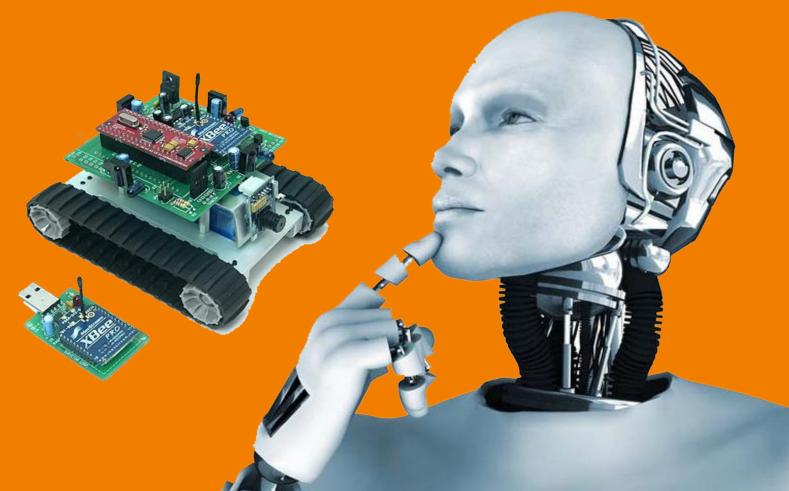


"Failure will never overtake me if my determination to succeed is strong enough"

## Yearly Course Curriculum

CLASS XI/XII- SCIENCE	CLASS XI/XII- TECHNOLOGY
Understanding the circuit	Tools description
Boolean operation	How to blink LED
Resistance, series & parallel	Switches and motor working
Colour coding	Basic Wired Robot
Potentiometer	LDR based project
Practical application of faraday's law	Wireless Charger
Refracting Index	Crane robot
Bending of light	Concept of wireless robot
Total Internal Reflection	Sensor based robot
	Application of sensor and relay

Note- To avoid repetition, the course curriculum would be upgraded time to time.



### ABOUT US

VIGYAN PATHSHALA is a unique concept of projecting Robotics, Science & Technology through Hands-on Live Project. Technical education has been the driving force of today's education system. We along with a team of engineers and educationist have developed a module which is suitable for Indian School curriculum, and have also built a team of trainers for the development.

We tend to believe that if student enjoy themselves while studying science and technology, they are much more likely to retain what they learnt. Keeping that in mind, we introduce a concept of Hands- On approach on Robotics, Science and Technology with main emphasis on Robotics.

Days are not far when robots will be everywhere and would be involved in the every aspects of life. The career opportunities in this field is quite fulfilling and exciting, still the adoption in this unique field is far too less as compared with other countries like China, Japan, Korea, Malaysia, Thailand and Indonesia. We are not even trying to draw a parallel with developed nation.

If you think that your Institute has keen interest, we would be glad to offer our fascinating and out of box method of practical learning towards Science, Technology and Robotics.

We at VIGYAN PATHSHALA create an unmatched ambience and aura of practical learning with fun in the field of Robotics, Science and Technology.

### **Our Offerings**

- 1. Yearly Program on Robotics, Science & technology
- 2. Short Duration Summer/Winter Camp
- 3. 4-5 Hrs. Robotics Workshop



# For Presentation Contact



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