

Star Kids Academy Robotics: 8 Perfect Reasons Why Kids Should Learn Robotics From A Young Age!



Introduction

Modern education systems put great emphasis on imparting STEM education to kids, given how the world is incessantly turning into a never-ending tech fest! But not all kids show interest or excitement to learn STEM subjects. This can be quite concerning for a parent as STEM education helps kids develop the fundamental concepts and an educational foundation they can build on.

We, at Star Kids Academy Robotics, want parents to rest assured their students are in good hands! Our team of expert computer science education communicators have developed a well-researched robotics course for kids that will enable and prepare them to have a brilliant future — all this while covering the STEM education essentials! In this post, we will learn about robotics and why kids should indulge in robotics education from an early age. Let's dive right in, shall we?

What is robotics and robot programming?

Some of the best-performing Hollywood flicks are based on robots, for example, WALL-E! Thanks to such exciting movies, kids have learned about the term "robotics." But, what exactly is robotics and what does it entail?

Robotics involves programming mechanical devices to make them follow a set of instructions or accomplish a task. Most robots built out of this simple concept have an onboard computer, motors and actuators to enable movement, limbs or wheels to add support, and sensors to help the robot perceive its environment.

In short, robots have the ability to be programmed and accomplish a task while responding to the environment according to instructions. These instructions are determined through robot programming, which is essentially a high-tech computer science developed by mankind.

At Star Kids Academy Robotics, we focus on helping kids learn how to program and engineer robots. Every element of the programming process is well demonstrated in the most interesting way possible. We ensure the students get well-acquainted with processes like designing, manufacturing and engineering, operating, and implementation while developing and programming highly interactive programs to control the robot autonomously!

8 benefits of learning robotics at an early age

Now that you are well acquainted with robotics and programming, it's time we move forward and learn about the potential benefits of learning robotics at an early age. Here's how learning computer science through robotics will benefit your students at Star Kids Academy.

1. Helps develop problem-solving skills

Problem-solving skills don't come naturally. Kids will have to put themselves in challenging situations, get comfortable in the dirt, and learn how to get out. Robotics can get very challenging as kids are learning the basics of engineering, networking, electric components, computers, and coding. The skills they will develop here will help them forever in their future workplaces.

2. Develops critical thinking skills

The ability to look at problems from different perspectives, learning about ways things can go wrong, and coming up with several potentially successful solutions helps develop strong critical thinking skills. Our robotics program allows students to think critically and create innovative solutions when working on any robotics-related problems.

3. Nurtures leadership skills

Leadership roles come with unique challenges that one can learn to overcome only through experience. Most robotics-related projects have a leader that envisions the solution and guides the project to successful completion. We train the kids to lead by example and develop essential life skills to become successful leaders.

4. Children learn about teamwork

As mentioned earlier, every robotics project will have a team. Different aspects of robot development are manned by different team members. Most importantly, team members' individual success will be interdependent. This makes it all the more crucial to becoming a good and reliable team member.

5. Robotics is a global revolution

More and more countries want to leverage the benefits of science and technology and grow into superpowers. These countries will need robots and related technologies to improve productivity and overall efficiency. Therefore, we ensure our robotics program promotes global understanding and that kids learn to work with members of other countries as well!

6. Helps develop hand-eye coordination

Robotics is one interesting field of computer science that allows kids to use both their hands and eyes at the same time. This goes a long way in improving their hand-eye coordination which can help them succeed in other areas of life. Not just that, they learn to use their hands, eyes, and mind to solve complex problems — all at the same time!

7. Exposure to other cultures

The kids enrolled at Star Kids Academy Robotics come from different countries, backgrounds, and cultures. The program gives an excellent opportunity for kids to learn about other cultures and get comfortable with other thought processes and perspectives. We promote cultural inclusion and understanding to ensure kids learn how to respect and work together with different cultures.

8. Helps pursue careers in science and technology

All the academic and life lessons learned in our program will help kids develop excellent careers in computer science and technology. They learn the basics of programming, engineering, designing, and electronics which is more than enough to spark interest in computer science and technology.

How do we make kids learn robotics effectively?

Our robotics for kids curriculum has everything a child will need to learn robotics from inside and out. At Star Kids Academy Robotics, we follow the best educational practices and tips to help kids learn robotics effectively. Here's how we do it.

Each kid learns differently

We have a huge experience of teaching robotics and other subjects to kids from elementary through middle school. One of our major findings is that each kid learns differently and requires different care. The instructors at Star Kids Academy Robotics acknowledge this and give each student ample attention so they can process the information effectively.

Providing the right tools

Kids need to have the right robot kit, set of tools, guides, manuals, and other materials to start learning robotics and programming. Our team has narrowed down the best platforms and coding environments for learning robotics as well as how to effectively communicate the process of learning to each student. We make sure the kids have everything they need to smoothen the learning process.

Helping kids follow instructions

Kids need to follow instructions to build an effective robot. Our instructors ensure that the students enrolled in the program understand the importance of following instructions as well as being able to create and imagine engineering solutions to solve problems. We believe that kids should learn the correct techniques and build the capacity to follow through with instructions as a starting point to creating and designing.

• Allowing extensive Q&A session

All instructors at Star Kids Academy Robotics want kids to grow up into highly influential future leaders. And one of the most common characteristics of highly influential people is that they are curious and want to ask questions. This is why we conduct extensive Q&A sessions where we discuss the commonly asked questions and give kids the opportunity to clear confusion and doubts.

Kids work with partners

Teamwork is indispensable. The students will grow into working professionals and will have to work within a team. We teach students to embrace their partners and groups and work through the project as a team. This helps students to take the learning process to a whole new level.

Allowing kids to take their time

Most robotic academies tend to rush through the classes to manage an increasing number of batches. Computer science is a complex subject that requires time if needed for those students who are grasping at a different pace. Therefore, we ensure the kids enrolled in the program take their time to learn robotics correctly instead of just rushing through the instructions.

Always encourage kids!

Robotics can be challenging at times, and our instructions will get difficult after a while to help kids unlock their true potential. However, our kids will never fall short of motivation as we keep encouraging them all the way. When the going gets tough, we stand by the kids and push them to try again, and again, and again, until they succeed!

What is the right age to learn robotics?

Recent studies suggest that children as early as pre-kindergarten can find robotics interesting and learn to master the foundational concepts of robotics programming. Kids as young as seven years old will easily master the concepts of complex robot programming and start developing robots by applying conditional logic. In other words, the earlier you enroll students in these programs, the better.

Final thoughts!

There you have it. We have shared some of the best reasons why kids should be taught robotics from an early age. Believe it or not, robotics and related modern technologies like coding and engineering, artificial intelligence, machine learning, virtual reality, and more are the future.

Kids that show interest in learning complex concepts or just like to have fun getting acquainted with robotics are bound to have an exciting future. Not just that, educational robotics makes an excellent learning tool that can guide young students that do not showcase skills or interest in STEM disciplines.

So, bring your future star kids to Star Kids Academy Robotics where we offer state-of-the-art robotics education for elementary through middle school students.

Our team of educational experts has devised a curriculum that will instill creativity, teamwork, and problem-solving skills in your child while helping them learn how to overcome challenges — all this through our well-researched learning process. Visit www.starkidsafterschool.org to register!

