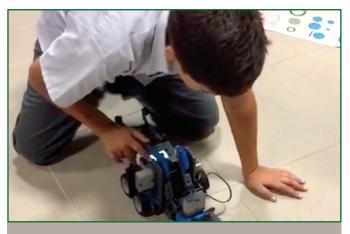## New Robotics Course Received with Enthusiasm

In the first term of the 2018-19 academic year, SABIS® launched a new Modular STEAM Robotics course for students aged 11 to 14. The new, action-packed course combines STEAM concepts and teamwork, allowing students to learn real-life skills while having real-kid fun.

"Our objective is to equip students at an early age with the skills they need to succeed in an increasingly technology-based marketplace," explained Mr. Roy Bistany, Academic Operations Manager at SABIS®. *"The new robotics course allows students to combine computational thinking and 21st century skills in a robotics-engineering context. It also teaches them to program intelligent robotics systems and allows them to develop a foundation of programming and coding."*

Throughout the course, students spend time disassembling and reassembling simple and complex robots to better understand the engineering and mechanics of the different robotics systems. By the end of the course, students are able to build intelligent and active robotics systems as well as design new robotic models to complete complex missions.

SIS-Adma student and his robot!

The curriculum consists of three sequential modules that cover fundamental chapters including basic movement, sensors, program flow, direct control, engineering design and mechanics, and much more. Each module covers several chapters that are broken into units that teach key robotics and programming concepts that are also reinforced with semi-open-ended challenges. These challenges require students to use the skills they have just learned to solve a relevant portion of the final unit challenge. Each unit challenge is based on the original robot's problem that the students must solve as an exercise and a demonstration of their mastery of the concepts.

This term, students were already successful in building and programming their first robot! Students used various types of intelligent sensors including a gyroscope sensor, ultrasound sensor, and bumper sensor, among others, to write simple and complex programming codes for the student-built robot to autonomously accomplish the allocated missions. The students' robots were successful on several missions including moving out of a maze without touching any walls, collecting various colored cubes and delivering them to the allocated locations, and more - all without any manual intervention from the students.

The new course was received with great enthusiasm from robotics enthusiasts at SABIS® schools in Lebanon!

"This course taught us a lot of skills such as building and programming a robot which will serve us in our future careers especially when studying engineering. I think this course will prepare us for the 21st century as the world is becoming more dependent on machines."

– Islam Rachid, Grade 6, ISC-Koura

"The robotics course is exciting and amazing. I had so much fun. The course will teach you how to work as a team, and you can make lots of friends."

– Trystan Van den Haute, Grade 7, ISC-Koura

"Why do I like robotics? First of all, it is all about communication with your team. When I first joined the course, I didn't realize I would have friends from different grades. Robotics was a great experience because I got to think outside the box. I am sure robotics will help me get into the best universities."

– Michel Issa, Grade 7, SIS-Adma

With the success of the course, which was piloted during the SIS-Adma summer school and launched at three SABIS® schools in Lebanon — The International School of Choueifat – Choueifat, The International School of Choueifat – Koura, and SABIS® International School – Adma — a number of SABIS® schools in the Gulf, Kurdistan, and Egypt will very soon be offering this course.

Watch this space for future developments in this area!