



جامعة بيروت العربية
BEIRUT ARAB UNIVERSITY



Overview for VEX educational Platform and Competition

(All you need to know to start)



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About Innovation First International



Overview

Innovation First International began by producing electronics for autonomous mobile ground robots and is now a leader in educational and competitive robotics products, and a growing developer of consumer robotics toys. Incorporated in 1996, Innovation First International is a privately held corporation that was founded on the belief that innovation is necessary very early in the design process to produce simple and elegant product designs.

Areas of Expertise

Innovation First International and its subsidiaries (VEX Robotics, Inc., RackSolutions, Inc., and Innovation First Labs, Inc.) are the undisputed leader in designing and supplying control systems to the largest educational robotics competitions worldwide. The VEX Robotics Design System is the leading classroom robotics platform designed to nurture creative advancement in robotics and knowledge of science, technology, engineering and math (STEM) education.

The VEX Robotics Design System has given way to other robotics products that span the education, consumer and business-to-business markets.

The companies are continuing to develop robotics to enhance the VEX experience and expanded its presence in the retail toy market with the launch of the HEXBUG line of consumer robotics toys in 2008.

Leveraging the company's core competency in electrical and mechanical engineering, the RackSolutions division was formed in 1999 with the goal of becoming the "Rack Mount Problem Solvers." RackSolutions now works closely with all major computer OEMs to provide custom mounting solutions and industry-wide rack compatibility for data installations of all sizes.

What is VEX? The VEX Robotics Design System offers students an exciting platform for learning about areas rich with career opportunities spanning science, technology, engineering and math (STEM). These are just a few of the many fields students can explore by creating with VEX Robotics technology. Beyond science and engineering principles, a VEX Robotics project encourages teamwork, leadership and problem solving among groups. It also allows educators to easily customize projects to meet the level of students' abilities. The affordable VEX platform is expanding rapidly and is now found in middle schools, high schools and university labs around the globe. Robotics hobbyists also appreciate the advanced capabilities of the VEX System.

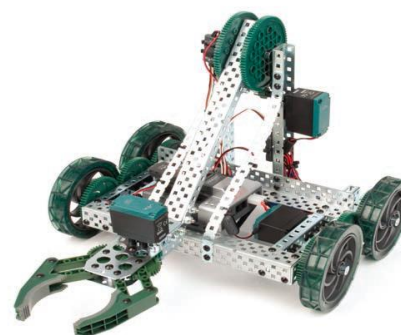
Classroom and Competition Robotics Kits are VEX latest turn-key offerings that provides affordable and still rich educational kit. These kits feature VEX newest and most popular products, a lower price and VEX new foundation robot, the VEX Clawbot.

Classroom and Competition Mechatronics Kit

\$799.99 - P/N: 276-2800

This kit supports 2-6 students per kit. The Classroom and Competition Mechatronics Kit provides for a focus on mechanical functions and advanced mechanisms using VEX most popular mechanical and structural equipment.

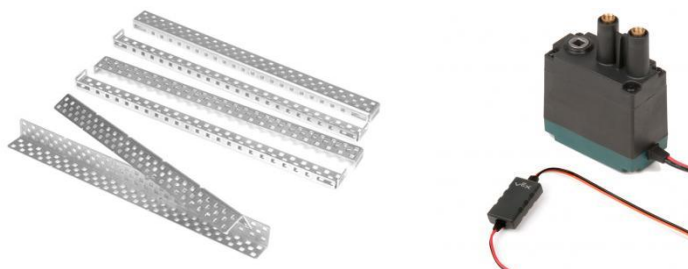
- ☒ Clawbot Robot Kit (4 motors included)
- ☒ Autodesk-VEX Curriculum
- ☒ VEXnet System Bundle
- ☒ Additional 2-Wire Motor 393
- ☒ Robot Battery, Joystick Batteries and Chargers
- ☒ Mechatronics Add-On Kit (1 motor, 2 sensors included)



The above package is considered the base for a robot kit that would be great for competition, the large set of component it contains opens the horizons for students to innovate and use whatever techniques, mechanisms they decide to adopt. We add to this package extra items that ensure that students won't need to make any pauses for the request of more items.

276-2298	Aluminum C-Channel 1x5x1x35 (6-pack)	1	\$59.99	\$59.99
276-2289	Aluminum C-Channel 1x2x1x35 (6-pack)	1	\$49.99	\$49.99
276-2304	Aluminum Angle 2x2x35 (6-pack)	1	\$44.99	\$44.99
276-1667	2-Wire Motor 269 w/ Motor Controller 29	4	\$19.99	\$79.96
			Total	\$234.93

The extras are long aluminum sheets and extra motors to ease the construction of large robust robots, the aluminum sheets added are 18 inch long which fit with competition rules also there are 4 extra motors so every team will by that has 10 motors which is the maximum number of motor to use in the competition.



According to that the recommended package for competition is as follow:-

Item code	Item	Quant	Unit Price	Total
276-2800	Class room and competition Mechatronics Kit	1	\$799.99	\$799.99
276-2298	Aluminum C-Channel 1x5x1x35 (6-pack)	1	\$59.99	\$59.99
276-2289	Aluminum C-Channel 1x2x1x35 (6-pack)	1	\$49.99	\$49.99
276-2304	Aluminum Angle 2x2x35 (6-pack)	1	\$44.99	\$44.99
276-1667	2-Wire Motor 269 w/ Motor Controller 29	4	\$19.99	\$79.96
Total				\$1,034.92

Robot price and extras price are identical to the purchase price in USA with no markup and shipping cost will be considered not to exceed 10% of the shipment value.

Event Registration

Event registration is a vital part of the competition organizing process. Registered events have the right to register their qualified teams to the world competition in Anaheim California.

The Event registration done through the registration of participating teams on the REC (Robot Education and Competition Foundation) which is a nonprofit organization responsible for organizing and supporting all robotics competition.



The **Robotics Education and Competition Foundation** exists to connect students, mentors, and schools in every community to a variety of successful and engaging technology-

based programs. Our goal is to provide these programs with services, solutions, and a community that allows them to flourish in a way that fosters the technical and interpersonal skills necessary for students to succeed in the 21st Century. Whether it's a competitive event, workshop, camp, or conference we understand the unprecedented level of passion and commitment it takes to create, maintain, and execute such programs. The Robotics Education and Competition Foundation is committed to promoting technology and related student and professional advancement so that one day these programs become accessible to all students and all schools in all communities.



Team Registration:-

Registration for a VEX Robotics Competition team costs \$75. Additional teams from the same (institute / schools/college ...etc.) can register for \$25.

Practice Field:-

For a team or more from the same college / school we recommend one practice kit for all. As the practice kit give the team the ability to test the implemented mechanisms (Grabbing / Elevation). Practice kit contains 20 sacks and one goal.

VEX Sack Attack Object Kit

P/N: 276-2513

This kit contains game objects to help with practicing for VEX Sack Attack.

(20) Green Sacks

(1) Gold Sack

\$49.99



Get Started:-

To Get started all you have to do is to log in to:-

<http://ArabVRC.ORG/>



Introducing the VEX Clawbot Kit.

نموذج جديد للإستخدام

لتعليم مبادئ الروبوتكس

أهمية المسابقة



مما لاشك فيه أن مسابقة Vex تعتبر الآن المسابقة الأكبر والأسرع انتشارا في العالم وحيث أن نظم التصميم والتدريب الخاصة VEX تعتمد مبدأ STEM وهي المواصفات القياسية الامميكية لتكامل وتربط المواضيع المتعلقة بالعلوم والتكنولوجيا والهندسة والرياضيات.

ولقد أدرجت العديد من الجامعات والدول أهمية تطبيق مبدأ STEM في مراحل التعليم المختلفة، من أمثلة هذه الدول نيوزيلندا وهي الدولة التي حققت ١٤ جائزة في بطولة عام ٢٠١١ حيث تقام جامعة ماسيه، Massey.

المصنمون



آخر الأخبار

٢٥ مايو

استمراراً للأثر المتميز الذي تركته الفرق المشاركة من المملكة العربية السعودية وكذلك دولة البحرين خلال المسابقة العالمية للروبوت التي عقدت في مدينة أنهام بولاية كاليفورنيا المزمدة...

ARABVRC.ORG is the competition dedicated website through which you can get info, lectures and Material but firstly you need to register your team. Based on registration Kit delivery will be arranged also training if needed will be coordinated.

Let's VEX