

♦ **2017 STEP Statewide Robotics Competition** ♦

Adelphi University ♦ Garden City, NY 11003

May 6, 2017

Competition Registration Information



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STEP Middle and High School Robotics Competition

The Middle and High School Robotic Competitions will take place on Saturday May 6, 2017 from 8 AM to 3 PM. This competition will be held in the Adelphi University Garden City Campus' Center for Recreation and Sports.

High school students will be competing with VEX robots and middle school students will be competing with LEGO robots.

Each team is required to pay a registration fee of \$300

Please make check payable to “Adelphi University Robotics Competition”

Mailing Address:
Sabita Nayak
Adelphi University, SW118
One South Avenue
Garden City, NY 11530

2017 STEP Statewide Robotics Competition Guidelines

The following criteria have been developed to guide the planning and the building of the high school and middle school students' robots.

High School Robot Requirements

The robot must be made with official VEX parts (with the exception of string or rubber bands) and not exceed the height, length, width limitations of 18" x 18" x 18".

Official Rules and Challenge will be given on December 15, 2016 for further detailed information

Students may can use **Classroom and Competition Mechatronics Kit (P/N: 276-2800) \$849.99**; however; it is more advantageous to buy parts the following page consists of parts that any starter team can utilize and personalize. Parts can be ordered from the vexrobotics website simply search for the item numbers or names. <http://www.vexrobotics.com/?ref=logo>

Middle School Robot Requirements

The robot must be made with parts found official LEGO EV3 and NXT kits. Only three motor slots can be occupied at one time.

Official Rules and Challenge will be given on December 6, 2016 for further detailed information

Parts can be ordered from the shoplego website. <https://shop.lego.com/en-US/LEGO-MINDSTORMS-EV3-31313?HQS=lego+mindstorms+ev3&cmp=KAC-SAHGOOGLEUS>

High School and Middle School Robot Presentations

Both high school and middle school must prepare a presentation. A presentation on a trifold 24" 36" poster board must be given on the development and features of the robot in front of judges. A brief Question and Answer will follow. Students will be graded on organization, knowledge, delivery, and professionalism. The presentation will contribute to fifty percent of the total team's score.

Item	Price per one	Quantity	Total Amount	Item Number	LEGEND
Chassis Kit, Large 35x35	\$24.95	1	\$24.95	275-1034	STRUCTURAL
C-Channel 1x5x1x25 (4-pack)	\$17.99	4	\$71.96	275-1138	
C-Channel 1x5x1x35 (4-pack)	\$19.99	4	\$79.96	275-1139	
C-Channel 1x2x1x35 (2-pack)	\$8.99	4	\$35.96	275-1139	
Angle 3x3x35 (4-pack)	\$19.99	2	\$39.98	275-1144	
Plate 15x5 (2-pack)	\$4.99	3	\$14.97	275-2023	
Plate 25x5 (4-pack)	\$14.99	2	\$29.98	275-1140	
4" Omni-Directional Wheel (2-pack)	\$24.99	2	\$49.98	276-2185	
2-Wire Motor 393	\$9.99	8	\$79.92	276-2177	MOTOR PARTS
Motor Controllers	\$9.99	8	\$79.92	276-2193	
393 Motor Turbo Gear Set (4-pack)	\$12.99	1	\$12.99	276-3527	
Drive Shaft 2" & 3" Pack	\$5.49	1	\$5.49	276-2011	
Drive Shaft 12" (4-pack)	\$8.96	2	\$17.92	276-1149	
Plastic Spacer, 4.6mm (20-pack)	\$2.99	2	\$5.98	276-2018	
Bearing Flat (10-pack)	\$4.99	1	\$4.99	276-1209	
Shaft Collar (16-pack)	\$7.99	4	\$31.96	276-2010	
Screw 6-32 x 0.375" Silver (50-pack)	\$4.95	1	\$4.95	275-0659	
Screw 8-32 x 0.250" (100-pack)	\$7.49	1	\$7.49	275-1002	ESSENTIALS
Screw 8-32 x 0.375" (100-pack)	\$7.49	1	\$7.49	275-1003	
Screw 8-32 x 0.500" (100-pack)	\$7.49	1	\$7.49	275-1004	
Kep Nuts 8-32 (100-pack)	\$3.99	2	\$7.98	275-1026	
Nut 8-32 Nylock (100-pack)	\$3.99	2	\$7.98	275-1027	
Extension Cable Retaining Clip (10-pack)	\$4.99	2	\$9.98	276-4128	
7.2v NiMH 3000mAh Robot Battery	\$29.99	2	\$59.98	276-1491	ELECTRICAL
Smart Charger v2 + NA cord	\$18.98	1	\$18.98	276-2520	
8-Bay AA/AAA Smart Battery Charger	\$12.99	1	\$12.99	276-1622	
AAA NiMH Rechargeable Battery (6-pack)	\$24.99	1	\$24.99	276-1696	
VEXnet System Bundle	\$399.99	1	\$399.99	276-1604	
Power Expander	\$49.99	1	\$49.99	276-2271	
			\$1,207.19		

Suggested VEX Part List for Starting Team

<http://www.vexrobotics.com/?ref=logo>

2017 STEP Statewide Robotics Competition Registration Form

Team registration form must be completed by March 1, 2017 and be submitted to snayak@adelphi.edu.

Please highlight or circle one: High School Middle School

STEP Institution: _____

Team Name _____

Team Advisor: _____

Team Advisor e-mail: _____

Team Advisor phone number: _____

1. Team member name _____

Grade _____

2. Team member name _____

Grade _____

3. Team member name _____

Grade _____

4. Team member name _____

Grade _____

5. Team member name _____

Grade _____

6. Team member name _____

Grade _____

Accommodations

Meals for students will not be provided with the exception during the competition. Breakfast and Lunch will be provided free of cost on Saturday.

La Quinta Inns & Suites Reservations:

Hotel Package Rates

Each institution is responsible for registering all students and staff attending under the institution directly with the La Quinta Inns and Suites. Phone: (516) 705-9000

Address: 821 Stewart Ave, Garden City, NY 11530

Adelphi University STEP Package Plan

Two Night Stay

Arrival Friday May 5, 2017 and Departure Sunday May 7, 2017

Package Rates per Day

Room Size	Amount without tax
Single	\$141
Double	\$141

It is the responsibility of each institution to supply a copy of their respective organization's tax exempt certificate to the **La Quinta Inns & Suites**. This certificate must accompany the hotel reservation form in order to receive tax-exempt status

Transportation will be provided by a La Quinta Inn Shuttle from and to La Quinta Inns & Suites with a travel time of 10 min (2.9 mi). Students can take the shuttle to Adelphi University, Roosevelt Field Mall or a nearby Long Island Railroad station.

