# 2016-2017 Sponsorship Package



**IEEE Student Branch** 

New York Institute of Technology Old Westbury Campus





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### **Letter of Introduction**

Dear Prospective Sponsor,

On behalf of the IEEE (Institute of Electrical and Electronics Engineers) at the New York Institute of Technology, Old Westbury, we, the executive board, would like to thank you for your interest in sponsoring our student organization. With your support, we can further develop our hands-on activities, competition preparedness, technical and professional workshops, and community-building events that have a significant impact on the engineering community at NYIT, and beyond.

IEEE at NYIT is a pre-professional organization which provides engineering students with the resources and extracurricular experiences to help them achieve their true potential as they develop into professional engineers. We host several annual team projects as well as over a dozen events for our student members.

Our projects are at the heart of everything we do as an organization. We commit each year to improving our reputation by offering some of the best hands-on experience available from any student organization.

Projects that we participate in are Micromouse and VEX Robotics. All projects run the length of the school year and require teams of students to design, build, and compete with robots suited for various complex autonomous tasks such as maze-solving, obstacle avoidance, object collection, action and reaction. Competitions showcase the teams' collective endeavors as they strive to build the most robust robots to complete these challenges.

Additional events are organized by the IEEE at NYIT officer board provides students with tools they need to succeed in their careers:

- Technical workshops demonstrate the theories taught in courses and teach our members hands-on experience that they may not receive in their courses.
- o Professional events establish connections between our members and prospective employers.
- Outreach inspires and informs the next generation of engineers.
- Social events build a cohesive community that attracts, engages, and retains engineering students.

This year has seen a huge influx of interest from motivated students in the ECE, CS, and ME majors. The main goal of the IEEE at NYIT is to provide the best extracurricular experience for students while appealing to the diverse interests of our members. To accommodate this growing interest, we are looking to expand our projects, workshops, and events to achieve the maximal benefit to our members.

Thank you for taking the time to look through this booklet to see what we have to offer.

Sincerely,

Kayla Ho

Kayla Ko

President

**Alexander Duong** 

Vice President

Michael Vangi

Mr. Vingi

Treasurer

### **VEX Robotics**

Imagine a competition of ideas, imagination, business and engineering that instills these virtues in your future employees and colleagues. The VEX Robotics Challenge is one of the many initiatives of our student branch that strives to increase the number of students interested in and involved in STEM and robotics. VEX Robotics offers STEM students and robotics lovers around our university, and around the world, the opportunity to develop their interests and work on something practical.

Team NYIT is one of many VEX U teams representing the United States in the international arena. Our program at NYIT began in 2009. **Teams of students brainstorm, design, build, program and test robots, and invent strategies** for competition. The VEX initiative helps **students mature into knowledgeable engineers, innovative thinkers, and excellent communicators**. Last season, *our team won the World Championships in Robot Skills* during the 2015-2016 Season held in Louisville, Kentucky.

Team NYIT attends at least 3 Regional Competitions each season in order to qualify for the World Championships, and we have qualified and competed at Worlds, a high-stakes 3-day competition in April, every year since the program developed on our campus.

Team NYIT's expenditures include not only robot parts and equipment, all of which must be VEX Robotics approved, but also competition field maintenance, registration costs and travel expenses for three regionals, pre- and post-season scrimmages, and the World Competition. We also need help funding additional supplies for our developmental teams so that we can engage as many students as possible.

Purpose	Expenses
VEX Robotics approved materials	\$4,290
Competition Field Expenses	\$300
Expenses for 3 Regional Qualifiers (registration, transportation, rooms, and meals)	\$2,250
Expenses for World Competition (4 rooms for 5 nights, meals, and transportation to and from Louisville, KY, USA)	\$10,380
5 Developmental Team Supplies	\$3,375
Total	\$20,595





### **MicroMouse**

The MicroMouse Competition is the newest initiative of the NYIT IEEE. Students work in teams to develop the skills that make our members unique. Their challenge is to design a robotic "mouse" that can autonomously solve a 16' x 16' square maze – ultimately determining the fastest route to the center of the maze only utilizing information accumulated during exploration of the maze. The team with the quickest speed run is the victor. It provides an environment where students learn to work as a team in the following topic areas: circuit design, programming, digital signal processing, prototyping, sensors, troubleshooting, budget, time and team management, communication and more.

Our team shall be competing in the IEEE Region 1 Student Conference in April 2017. Students from all over the Northeastern United States meet for the three day conference encompassing an undergraduate paper competition, ethics competition, MicroMouse Competition, and a technical workshop. This conference offers our students an opportunity to mingle with, network with, and learn from their peers and industry leaders. In order to show what their "mouse" can really do during the competition, our team needs a new field.

Thus far, our team has been using whatever materials we can repurpose for their field – wooden pallets, cardboard boxes, paint, and etc. – but in order to show what their "mouse" can really do, they need a real field as well as electronic components to help with wear and tear, and the occasional burn-out. Expenditures for MicroMouse include our first field, robot parts, construction and testing equipment, registration costs and travel expenses for the competition. We also need additional supplies for our developmental teams (a \$500 budget per team) so that we can engage as many students as possible.

Over the past year there has been a spike in the popularity of the MicroMouse project among graduate and undergraduate students. We have funded 1 MicroMouse team, but we aim to increase the number of beginner teams to 3 to cultivate this surging interest.

Purpose	Expenses
16' x 16' MicroMouse Field	\$5,215
Consumable Electronic Components for Competition Team	\$679
Expenses for Student Competition (registration, transportation, rooms, and meals)	\$1,738
3 Beginner Team Supplies	\$1,350
Total:	\$8,982

### **Outreach**

The officers of the IEEE at NYIT provide opportunities for younger generations to learn about a future in the fields of Electrical Engineering, Computer Engineering, Computer Science, and STEM in general.

Each year, all the engineering organizations at our university come together to host our annual "Introduce a Girl to Engineering Day." In the past, we have done LED soldering workshops and robotics workshops with the girls in attendance, but last year we were unable to receive the funds to do so. Last year, we had over 100 attendees from various youth organizations on Long Island, and that is just the number of students that attended! It was a huge success, and many of the students want to return this year to get some hands-on experience. The only limiting factor is funding, which is why we need your help to make this event happen.

Our officers and project team members also connect with youth by visiting grade-school and high-school events where they demonstrate projects, mentor the youth, and provide information about the STEM fields. We also mentor robotics teams from high schools in our community. This is all part of our mission to help develop future engineers, by engaging and encouraging students at a young age.

The Outreach leaders want to instill the spirit of engineering in youth and to do that they need the proper tools and materials so that the kids have a positive and engaging experience. We need components such as breadboards, soldering supplies, circuit devices, and measurement tools.

Our officers also want to develop an all-expenses-paid Youth STEM fair or hackathon to help create an interest in applied STEM for the youth in our community. We hope to gather enough funding to make this opportunity happen for students from all underrepresented groups so that we can foster a love a STEM while simultaneously teaching practical electronic and programming skills.

Purpose	Expenses
Introduce a Girl to Engineering Day Event	\$500
Tabling at STEM Events	\$350
First Youth STEM Fair	\$2,200









## **Technical Workshops**

Every semester, NYIT IEEE host workshops to teach members practical skills not covered in class. The workshops are created with members' career prepared ness in mind. Our most popular workshops are our Soldering 101, iOS Application Development and Learn to Build a Robot.

This year we want to hold a PCB and Circuit Design workshop as well as a 3D Design and Laser Design workshop. However, the complexity of the workshops as well as the practical skills that our members can learn will depend on the funds we can raise.

Members appreciate that at the end of the workshop they get to take home their creation and continue tinkering or return to the IEEE Workshop to use the tools available. Restocking our supplies to continue this tradition requires steady funding. After some period of usage, Soldering irons, De-Soldering Pumps, Resistors, LEDs and other tools get damaged or worn, and require parts or work to maintain them. We make every effort to make sure that members learn how to properly care for the equipment, but each year, equipment inevitably gets damaged or broken and require maintenance or replacement.

With your help we can provide high quality and engaging workshops to a huge number of our student members. We also welcome company-hosted workshops, as well as the donation of materials.

Purpose	Expenses
Hosting 10 workshops (Parts, room reservation, guests)	\$2,000
Miscellaneous Maintenance/ Tools	\$500

## **Professional Development**

Professional development is essential for anyone considering an engineering related discipline, but it can also be intimidating. The IEEE at NYIT is determined to provide students with opportunities to mature themselves professionally. Opportunities include workshops, information sessions, and recruitment events. These allow students a chance to familiarize themselves with different companies and learn first-hand how to best prepare for their future careers.

A strong network is also important. Connections allow for the optimal pairing of students with the jobs that best fit them. This is beneficial to both the student and the employer. Many students are interested in information sessions where they can learn about industry, as well as network with potential employers. We would like to extend an invitation to you and your company to collaborate with IEEE at NYIT. We welcome you to host an info session, tour, and/or recruiting event this year. Please feel free to contact us with requests, or to inquire about future opportunities.

Previous professional development events have included:

- Alumni Alliance
- Resume workshops
- LinkedIn workshops
- Mock Interview Rounds
- Conference Preparation Boot Camps

### **IEEE Workshop**

NYIT IEEE's main headquarters is the IEEE Workshop. This is where IEEE members, both students and officers, gather to plan events, conduct workshops, study together, and simply enjoy being geeks and nerds. We welcome fellow student engineering organizations because a community is fundamental to our organization, and so the IEEE Workshop is cherished by all STEM students. The IEEE Workshop also serves as our lab room, housing many valuable tools and machinery.

All IEEE project teams, and their respective members, have the opportunity to utilize the IEEE Workshop's resources. Members that have engineering projects aside from the IEEE projects can also utilize the workshop to further develop their interest in engineering. To maintain the functionality of the IEEE Workshop, we do our best to stock adequate supplies.

Members value our commitment to providing useful and convenient ways to work. To optimize their experience, we want to provide additional white boards so members can communicate effectively during discussions. We need a new set of chairs and tables to replace our motley array of second-hand, unsightly and mostly damaged IEEE Workshop furniture. Also, to improve security and storage, we would like to purchase large, locking cabinets.

We are also determined to provide the power tools that our teams consistently request to remain competitive and enhance their skill set. In addition to providing tools, we wish to stock up on resistors, capacitors, and transistors, and vary our component offerings to include op-amps, programmable chips, sensors of various types, etc. In addition to ensuring there are adequate tools in peak condition, NYIT IEEE is looking to expand our current set of tools. We only have a few DC power supplies and oscilloscopes, but do not have any function generators, a 3D printer nor a CNC machine.

Our top priority is to promote and provide an attractive engineering environment with well-equipped test benches, as all our project teams are vigorously working to finish their respective projects at the same time. Better resources allow students to pursue more complex and relevant projects.

Purpose	Expenses
Updating Electronic Tools	\$500
Consumable Electronics	\$500
Updating Security and Storage Features	\$500
Updating Lab Equipment	\$2,000

# **Sponsorship Levels**

NYIT IEEE offers various levels of sponsorship that are suitable for your organization. In return, we wish to give recognition for your investment in developing the next generation of professional engineers. For a customized package or wish to contribute with alternate forms of sponsorship--such as materials and equipment--then please contact NYIT IEEE directly so that we may help make your sponsorship possible. **Thank you.** 

#### Standard Package: \$100 to \$499

- 1. Signed Team Picture
- 2. Letter of Sponsorship

#### Bronze Package: \$400 to \$999

- 1. Name/Logo on Robots
- 2. Name/Logo on the NYIT IEEE website
- 3. Letter of Sponsorship
- 4. Signed Team Picture

#### Silver Package: \$1,000 to \$1,499

- 1 Invitation to one tech-talk or info session with food, room reservation, and event advertising
- 2 Name/Logo on Robots
- 3 Name/Logo on the NYIT IEEE website
- 4 Letter of Sponsorship
- 5 Signed Team Picture

#### Gold Package: \$1,500 to \$2,499

- 1 Name/Logo on Team Shirts
- 2 Invitation to two tech-talk or info sessions with food, room reservation, and event advertising
- 3 Name/Logo on Robots
- 4 Name/Logo on the NYIT IEEE website
- 5 Letter of Sponsorship
- 6 Signed Team Picture

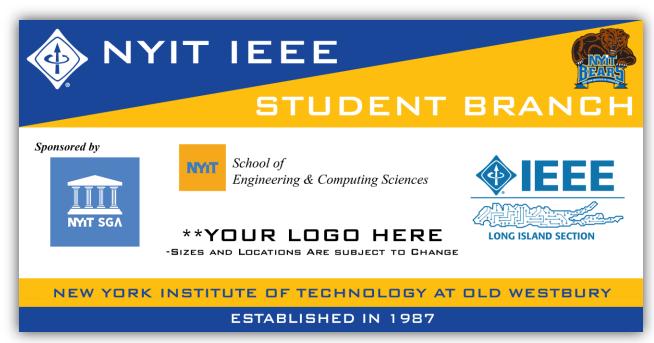
#### Platinum Package: \$2,500+

- 1 Honorary Plaque to be presented at the end of the robotics season
- 2 Name/Logo on Team Shirts
- 3 Invitation to two tech-talks or info sessions with food, room reservation, and event advertising
- 4 Name/Logo on Robots
- 5 Name/Logo on the NYIT IEEE website
- 6 Letter of Sponsorship
- 7 Signed Team Picture

<sup>\*\*</sup>The company banner shall have the name/logo of sponsors with bronze packages or higher.

# **Sponsorship Promotion**

### **Company Banner**



#### **Team Shirt**



## **Contact Us**



Email: <u>ieeeow@nyit.edu</u>

Official Website: ieeenyitow.weebly.com Facebook page: Facebook.com/nyit.ieee

Twitter: @nyitieee Instagram: @nyitow\_ieee

Kayla Ho	President	kho02@nyit.edu
Alexander Duong	Vice President	aduong@nyit.edu
Michael Vangi	Treasurer	mvangi@nyit.edu
Babak Dastgheib-Beheshti, Ph. D.	Counselor	bbehesht@nyit.edu

# **Sponsorship Form**

Sponsor Name:			
Representative Name:	Representative Title:		
Address:			
Phone #: ()	Email Address:		
<ul> <li>□ All Activities</li> <li>□ VEX Robotics</li> <li>□ MicroMouse</li> <li>□ We would like to donate materials to NY</li> <li>□ All Activities</li> </ul>	Technical Other Professional  YIT IEEE to contribution towards: (please choose below) Outreach □ IEEE Workshop		
<ul><li>□ VEX Robotics</li><li>□ MicroMouse</li></ul>			
<ul> <li>□ We are interested in working with NYIT IEEE to host a Technical Workshop.</li> <li>□ We are interested in working with NYIT IEEE to host a Professional Development Workshop.</li> </ul>			
The funds and/or supplies indicated will be made out to NYIT IEEE at Old Westbury within 30 days.			
Representative's Name Representative's Signature			
This sponsor shall be granted a	ll benefits of its sponsorship package.		
NYIT IEEE President's	Name NYIT IEEE President's Signature		

Please fill out this form and email to NYIT IEEE at <a href="ieeeow@nyit.edu">ieeeow@nyit.edu</a>.

Please make donation out to: NYIT

with memo line: NYIT IEEE

and mail to:

NYIT IEEE, Attn: Dr. Babak D. Beheshti New York Institute of Technology Harry J. Schure Hall, Room 219 Old Westbury, New York 11568-8000