



NSBE Jr.
NATIONAL SOCIETY OF BLACK ENGINEERS

PRE-COLLEGIATE INITIATIVES

RULE

BOOK

2026 - 2027

NSBE's mission is to increase the number of culturally responsible
Black engineers who excel academically, succeed professionally,
and positively impact the community

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INTRODUCTION TO NSBE

NSBE

The National Society of Black Engineers (NSBE) was founded in 1975 by six Black engineering undergraduates and their faculty adviser at Purdue University. The aspiration of these founders, and the college students from across the nation who became NSBE's charter members, was to establish a student organization to help improve the recruitment and retention of Black engineering scholars. NSBE is now one of the largest student-led organizations based in the United States, with more than 25,000 members in the U.S. and abroad.

NSBE is composed of more than 670 chapters on college and university campuses, 181 professional chapters nationwide and 108 NSBE Jr. chapters. These chapters are geographically divided into six regions.

NSBE's mission is "to increase the number of culturally responsible Black Engineers who excel academically, succeed professionally and positively impact the community." For more information about NSBE, please visit www.nsbe.org.

In fulfillment of 's NSBE objective to "stimulate and develop student interest in the various engineering disciplines," various programs, including technical competitions have been created for pre-college students.

PCI

The Pre-College Initiative (PCI) Program seeks to lead the world in enhancing pre-college students' academic, technical and leadership skills, to maximize their success in life. Our primary goal is to encourage students in grades 6–12 to develop interest in science, technology, engineering and mathematics (STEM).

NSBE's vision is to establish PCI as an incubator for our youth, where they can be nurtured and guided in their academic careers. NSBE chapters support PCI through multiple programs.

NSBE JR.

A vital component of the PCI Program is NSBE Jr., which serves as the membership category for pre-college students and their institutions that are officially chartered with NSBE. NSBE Jr. members and chapters are at the core of PCI, as they are the primary beneficiaries of PCI programs.

NSBE Jr. focuses on enhancing the education received by African - American and other minority pre-college students, as well as influencing these students to become tomorrow's corporate executives, entrepreneurs and government and community leaders. In this spirit, NSBE Jr. is the quintessential recruitment, teaching and preparation device for NSBE.

KidWind[®]

PROJECT

The KidWind Challenge is a hands-on design competition that engages students in STEM through the lens of wind energy. Student teams design and construct small wind turbines that they test, and then meet with a panel of judges to present their design process and demonstrate their conceptual knowledge on renewable energy.

When students participate in a KidWind Challenge they will:

- Discover the promise and limitations of wind energy technology.
- Design, build and test a functional creative wind turbine.
- Compete with their peers in a supportive environment.

KIDWIND TURBINE AND GENERATOR RULES

- Each team that registers must have its own turbine. Teams will not be allowed to modify another team's turbine and use it for testing. Teams cannot share one turbine and simply change blades or other parts for each team.
- The turbine must fit inside the wind tunnel and operate within its 48" x 48" internal dimensions. It is highly recommended that participants design their turbine to fit within these dimensions with plenty of room. Sandbags or other weights will be available to hold the turbine in place, but we have found that almost all turbines shake and move a little in the tunnel, so it is a good idea to have extra space!
- There are no budgetary restrictions for your turbine design, but it is important to keep in mind that part of the judging process is the economical use of resources. Please use materials responsibly.
- You may only use one generator per turbine.
 - NSBE teams only compete in the KIDWIND GEN DIVISION. Teams are only permitted to use a KidWind Generator. Judges will inspect your generator to confirm your team will participate. Please make sure that your generator is visible.
 - There is no NSBE OPEN KIDWIND Division
- Power must be generated solely by wind, using the wind tunnel.
- Your turbine can be built on either a vertical or horizontal axis.

- Your turbine may use a gearbox, pulley system, or similar mechanism to increase power output. You may use pre-manufactured gearboxes and other parts, but keep in mind that innovation is a critical judging criterion, and parts that you make on your own will earn you more points.
- You cannot use pre-manufactured wind turbine blades or airfoils/sheets.
- Your wind turbine must be free-standing. A tower/stand will not be provided.
- Metal, plexiglass and similar blade materials are highly discouraged because they are potentially dangerous. On occasion, we have allowed these types of blades to be used, but only after local judges determined that there was an extremely low risk of failure due to assembly. Send us photos by email to info@kidwind.org if you are unsure. Please be aware that turbines will be disqualified if they are deemed unsafe by the local judges.
- The use of 3D-printed parts and components is allowed. Although you do not have to use files you created yourself, you should bring documentation about the CAD files to the Challenge and be prepared to discuss the design and the 3D printing process. Judges will want to make sure you understand this technology if you decide to use it.
- Students have used wheels from bicycles as part of their turbines. These are allowed since bike wheels are designed to spin at high RPM. Please be aware that if the wheel assemblies appear unsafe, local judges will disqualify these turbines.
- Although the use of shrouds to channel the wind is permitted, the turbine and the shroud must fit completely inside the wind tunnel to qualify. If any part of the shroud is outside of the wind tunnel during the test, the turbine will be disqualified. Any shroud that is used must be physically connected to your wind turbine (tower, nacelle or other structure). It must move as you move the turbine and should not be independent of your turbine.

JUDGING AND AWARDS

Your team's turbine will be assessed by four categories, each weighted differently **as shown in the diagram below**. So, brush up on your turbine knowledge, find the best materials and parts you can get your hands on, and have some fun along the way.

TURBINE JUDGING RUBRIC

- Energy Produced in Tunnel (35%)
- Turbine Design (30%)
 - Innovation (10%)
 - Blades (10%)
 - Drivetrain (10%)
- Report/Engineer's Notebook/Documentation (35%)

ENERGY PRODUCED

The total energy output of your turbine over the 30- to 50-second trial period will be collected using data-logging software. Each team's energy output will be ranked relative to that of other competitors. Each team will receive points corresponding to its rank. In all cases, you want to generate as much energy as possible to get a high score.

TURBINE DESIGN

Judges will inspect the parts of your wind turbine closely. They will also conduct a brief interview with your entire team to understand why you chose the parts you did and why you think they work. A panel of judges will examine your wind turbine design before testing it in the wind tunnel. You must be prepared to discuss/defend the choices you incorporated into the design. The design criteria you will be judged on include:

- The choices and mechanisms by which you maximized power output.
- Craftsmanship of your design, creativity and environmental decisions (E.g., Did you use recyclable materials? Can you take your turbine apart after the competition and reuse the parts?)
- The judges will be very interested in how you developed and constructed specific parts of your turbine. Make sure you understand the decisions you made when constructing the following components.
 - Blades (10%)
 - Drivetrain (10%)
 - Innovation (10%)

DOCUMENTATION OF DESIGN

All students must complete a Project Profile Form. This sheet should be presented to your judges when you enter the judging room.

In addition to this sheet, teams may also share additional documentation with the judges that showcases, with more detail, their design process and knowledge of wind energy science. It is up to each team to determine how they want to document this part of their project. In the past, we have seen short reports, engineers' notebooks, videos (maximum of 4 minutes), PowerPoints, and science fair poster boards.

APPLICATION PROCEDURE

KidWind registration is completed via an online application through Jotform. Applications to compete at the Annual Convention will open at a later date. An email will be sent. If you're not subscribed to the mailing list, please use this [link](#) to be added. Each team interested in competing at the 2027 Annual Convention must submit an application and meet all the team requirements. Completing all of the information in the application is vital.

KIDWIND REGISTRATION INFORMATION TEAM REQUIREMENTS

Every KidWind team must:

- Consist of a minimum of two (2) and up to a maximum of four (4) participants.
- Consist of a combination of students in grades 4– 5, 6– 8 or 9– 12. These are separate age divisions; you cannot create a team that includes students in grades 4– 12 combined.
- Attend the 2027 Annual Convention in Boston, MA. March 31– April 4, 2026.
- Consist of active NSBE Jr. members.
- Complete all application and registration requests before the deadlines.
- Chapter advisor and team coaches must provide a satisfactory NSBE background check by applying here: <https://nsbe.jotform.com/membership/background-check-request>

CRITICAL 2026–2027 KIDWIND DATES

For quick reference, the following target dates are listed to ensure your participation in NSBE KidWind. Please read responsibilities, events, and target timeline carefully. Available links and resources are listed below and should be followed in the suggested order. For further information on the upcoming NSBE Annual Convention , please visit convention.nsbe.org

TEAM RESPONSIBILITY AND EVENTS	TARGET TIME FRAME
KidWind New Team Resources, Registration and Application	For NEW teams: Visit the KidWind links (below) to learn more about the competition and how to create a team. 1.Plan for KidWind. 2.Rules and Judging Rubric for KidWind. 3.Gear for KidWind. (You do not have to purchase kits. It's strongly suggested that you recycle materials around you classroom or home!) 4.Building guidelines and resources for KidWind. 5.Take a look and sign up for upcoming workshops here. Review the above resources, and register your team for the NSBE KidWind Wind Challenge no later than Friday, January 8, 2027.
All KidWind Teams NSBE Registration	All teams are required to submit a registration application for NSBE's KidWind 2026– 2027 competition at the 2027 Annual Convention. • Once available, all registration links will be shared via email and during advisor calls. Registration deadline is Friday, January 8, 2027. Participation confirmation will be sent out by Friday, January 29, 2027.
National Competition	Held at NSBE's Annual Convention March 31–April 4, 2027, in Boston, MA.



MATCHCOUNTS COMPETITION COMPONENTS

MATHCOUNTS Written Team Competition is designed to be completed in 20 minutes at the Annual Convention.

The Team Round consists of 10 problems that team members work to solve together. Team member interaction is permitted and encouraged. Calculator use is permitted.

The MATHCOUNTS Final Countdown Round is designed for teams to compete head-to-head. A problem is presented to two teams at a time. The question will be read aloud as well as presented on a screen. Students can use a pencil and scratch paper and discuss with their teammates. Teams have 45 seconds to determine the answer and hit a buzzer when they are ready to answer. The other team can continue to work while their opponent is answering. The team that answers correctly the most questions, out of three, moves on to the next round. Calculators are not permitted.

COMPETITION RULES

Pencils and paper will be provided to students; however, students may bring their own pencils, pens and erasers if they wish. They may not use their own scratch paper or graph paper.

Calculators are permitted in the Team Round. Students may use any calculator (including programmable and graphing calculators) that does not contain a QWERTY (typewriter-like) keypad. Calculators that have the ability to enter letters of the alphabet but do not have a keypad in a standard typewriter arrangement are acceptable. Smart phones, laptops, iPads, iPods, personal digital assistants (PDAs) and any other “smart” devices are not considered to be calculators and may not be used during competitions. Students may not use calculators to exchange information with another person or device during the competition. Coaches are responsible for ensuring that their students use acceptable calculators, and students are responsible for providing their own calculators (and batteries).

Should there be a rule violation or suspicion of irregularities, the MATHCOUNTS competition official has the obligation and authority to exercise their judgment regarding the situation and take appropriate action, which might include disqualification of the suspected student(s) from the competition.

Use of notes and other aids (including graph paper, rulers, compasses, protractors, reference tables and dictionaries) is not permitted.

Communication with coaches is prohibited during rounds but is permitted during breaks. All communication between guests and students is prohibited during competition rounds.

COMPETITION RULES

Each Team Round question is worth two (2) points. There are 10 questions in the Team Round, so the maximum possible team score is $10(2) = 20$.

Ties will be broken as necessary to determine team prizes. The team with the higher Team Round score receives the higher rank. If a tie remains after this comparison, specific questions from the Team Round will be compared. Note: these are very general guidelines. Competition officials receive more detailed procedures.

In general, questions in the Team Round increase in difficulty so that the most difficult questions occur near the end of the round. In a comparison of questions to break ties, generally, those who correctly answer the more difficult questions receive the higher rank.

TEAM REGISTRATION:

- NSBE Jr. chapters must be registered as a MATHCOUNTS National MathClub to participate in the NSBE MATHCOUNTS event. Register your chapter [here](#).
- Each team must be exactly four (4) students in grades 6–8.
- Consist of active NSBE Jr. members.
- Attend the 2027 Annual Convention in Boston, MA, March 31–April 4, 2027.
- Complete all application and registration requests before the deadlines.
- Chapter advisor and team coaches must provide a satisfactory NSBE background check by applying here: [NSBE Jr. Advisor Background Check](#)

APPLICATION PROCEDURE

NSBE MATHCOUNTS competition registration is completed via an online application through Jotform. Applications to compete at the Annual Convention will open at a later date. An email will be sent. If you're not subscribed to the mailing list, please use this [link](#) to be added. Each team interested in competition at the 2027 Annual Convention must submit an application and meet all of the team requirements. Completing all of the information in the application is vital.

CRITICAL 2026–2027 MATHCOUNTS DATES

For quick reference, the following target dates are listed to ensure your participation in MATHCOUNTS. For further information on the upcoming NSBE Annual Convention, please visit convention.nsbe.org.

TEAM RESPONSIBILITY AND EVENTS	TARGET TIME FRAME
MATHCOUNTS National MathClub Registration and Annual Convention Event Registration	Register your NSBE Jr. chapter as a MATHCOUNTS National MathClub no later than December 31, 2026, using the link here. Register your team(s) using our JotForm. Applications to compete at the Annual Convention will open at a later date. An email will be sent. If you're not subscribed to the mailing list, please use this link to be added. Submission deadline is Friday, January 8, 2027. • Confirmation of team participation will be sent by Friday, January 29, 2027.
NSBE National MATHCOUNTS Event	Held at NSBE's 2027 Annual Convention in Boston, MA, March 31–April 4, 2027.

RECF ENGAGE

ROBOTICS COMPETITION

TIER TAKEOVER

In RECF Engage, students will explore creativity, teamwork, innovation, and engineering in a fun environment designed to inspire the next generation of problem-solvers and leaders.

RECF ENGAGE ROBOTICS COMPETITION COMPONENTS:

The 2026 - 2027 Tier Takeover game manual can be found [here](#).

TEAM REGISTRATION:

- Each team must be a combination of students in grades 3–8.
- Teams must consist of at least two (2) students and no more than ten (10).
- To waive the RECF registration fee (\$175), register your team(s) with RECF no later than December 16, 2026 by contacting your state's Regional Support Manager, locate their email [HERE](#) and copy Deborah Cavalcante (deborah_cavalcante@recf.org)
- If you have already registered and paid the \$175, email pci@nsbe.org and deborah_cavalcante@recf.org a copy of your order confirmation to receive a credit. Include the subject line "26 - 27 NSBE RECF Team Reimbursement"
- If your chapter intends to purchase parts and/or game elements, you must also register and receive a VEX team number (\$200) no later than December 16, 2026. NSBE will reimburse the cost of this registration fee for up to 25 teams. An application will open in November.
- Attend the 2027 Annual Convention in Boston, MA, March 31 - April 4, 2027.
- Consist of active NSBE Jr. members.
- Complete all application and registration requests before the deadlines.
- Chapter advisor and team coaches must provide a satisfactory NSBE background check by applying here: [NSBE Jr. Advisor Background Check](#)

APPLICATION PROCEDURE:

Each team must follow the application procedure below to be eligible to compete:

- Sign up and/or register the team for the 2026–2027 season on robotevents.com. You will be required to identify as a school-based or community-based team.
- Submit registration to compete at NSBE's 2027 Annual Convention no later than January 8, 2027.
- Meet all critical 2026–2027 dates listed below.

CRITICAL 2026–2027 VEX IQ DATES

For quick reference, the following target dates are listed to ensure your participation in NSBE VEX IQ. Please read responsibilities, events, and target timeline carefully. ALL links and resources are listed below and should be followed in the suggested order. For further information on the upcoming NSBE conferences, please visit convention.nsbe.org

TEAM RESPONSIBILITY AND EVENTS	TARGET TIME FRAME
REC Foundation Team Registration	Deadline to register teams for the 2026–2027 RECF Robotics Competition season is December 16, 2026. - To waive the RECF registration fee (\$175), register your team(s) no later than December 16, 2026 by contacting your state's Regional Support Manager, locate their email HERE and copy Deborah Cavalcante (deborah_cavalcante@recf.org) - If you DO NOT register by this deadline, you cannot compete at the 2027 Annual Convention. - Visit https://events.vex.com/register/teams to register for a VEX team number, ONLY if you intend to purchase materials / game elements for RECF Robotics competitions.
NSBE RECF Engage Robotics Competition Team Registration	Deadline to register for the RECF Engage Robotics Competition at NSBE's 2027 Annual Convention is January 8, 2027. - Submit application to compete at NSBE's 2027 Annual Convention no later than Friday, January 8, 2027. - Confirmation of participation at Annual Convention will be sent out by Friday, January 29, 2027. Annual Convention registration links will be shared at a later date through email and during advisor meetings.
NSBE's National RECF Robotics Competition	Held at NSBE's 2027 Annual Convention in Boston, MA, March 31–April, 2027.



RECF Achieve provides a fun environment where creativity, teamwork, and innovation can thrive in the face of a new challenge. Throughout the competition season, students will unlock their potential in the fields of science, technology, engineering, arts, math and computer science.

RECF ACHIEVE ROBOTICS COMPETITION COMPONENTS:

The 2026 - 20227 Pinnacle game manual can be found [here](#).

TEAM REGISTRATION:

- Each team must be a combination of students in grades 6–12.
- Consist of at least two (2) students and no more than 10.
- To waive the RECF registration fee (\$175), register your team(s) with RECF no later than December 16, 2026 by contacting your state's Regional Support Manager, locate their email [HERE](#) and copy Deborah Cavalcante (deborah_cavalcante@recf.org)
- If you have already registered and paid the \$175, email pci@nsbe.org and deborah_cavalcante@recf.org a copy of your order confirmation to receive a credit. Include the subject line "26 - 27 NSBE RECF Team Reimbursement"
- If your chapter intends to purchase parts and/or game elements, you must also register and receive a VEX team number (\$200) no later than December 16, 2026. NSBE will reimburse the cost of this registration fee for up to 25 teams. An application will open in November.
- Attend the 2027 Annual Convention in Boston, MA, March 31–April 4, 2027.
- Consist of active NSBE Jr. members.
- Complete all application and registration requests before the deadlines.
- Chapter advisor and team coaches must provide a satisfactory NSBE background check by applying here: [NSBE Jr. Advisor Background Check](#)

APPLICATION PROCEDURE:

Each team must follow the application procedure below to be eligible to compete:

- Sign up and/or register the team for the 2026–2027 season on robotevents.com. You will be required to identify as a school-based or community-based team.
- Submit registration to compete at NSBE's 20267Annual Convention no later than January 2, 2027.
- Meet all critical 2026–2027 dates listed below.

CRITICAL 2026–2027 VEX ROBOTICS DATES

For quick reference, the following target dates are listed to ensure your participation in the VEX v5 Robotics Competition. Please read responsibilities, events and target timelines carefully. All links and resources are listed below and should be followed in the suggested order. For further information on the upcoming NSBE conferences, please visit nsbe.org.

TEAM RESPONSIBILITY AND EVENTS	TARGET TIME FRAME
REC Foundation Team Registration	Deadline to register teams for the 2026–2027 RECF Robotics Competition season is December 16, 2026. - To waive the RECF registration fee (\$175), register your team(s) no later than December 16, 2026 by contacting your state's Regional Support Manager, locate their email HERE and copy Deborah Cavalcante (deborah_cavalcante@recf.org) - If you DO NOT register by this deadline, you cannot compete at the 2027 Annual Convention. - Visit https://events.vex.com/register/teams to register for a VEX team number, ONLY if you intend to purchase materials / game elements for RECF Robotics competitions.
RECF Robotics Competition Team Registration	Deadline to register for the RECF Robotics Competition at NSBE's 2027 Annual Convention is January 8, 2027. - Submit application to compete at NSBE's 2027 Annual Convention no later than Friday, January 8, 2027. - Confirmation of participation at the Annual Convention will be sent out by Friday, January 29, 2027. Annual Convention registration links will be shared at a later date through email and during advisor meetings.
National Competition	Held at NSBE's 2027 Annual Convention in Boston, MA, March 31–April 4, 2027.



TEN80-NSBE STEM CHALLENGES

The Ten80 STEM Challenges—the Ten80 Racing Challenge and Ten80 Autonomous Vehicle (AV) Challenge—are powered by Future STEAM and featured at the NSBE Annual Convention.

Middle and high school teams, supported by mentors and educators, work like real STEM professionals—engineers, designers, marketers, and motorsports teams—and compete at local, regional, and national events or in the online Points Race.

TEN80 STEM CHALLENGE COMPETITION

Teams compete with their vehicle and showcase a business built around it through project management, presentations, data-driven design posters, and marketing projects.

Teams using Ten80 curriculum are invited to regional competitions, the Ten80-NSBE Finals at the NSBE Annual Convention, and Ten80 Nationals each spring. Curriculum modules are designed for both in-school and out-of-school settings.

Both competitions include these categories (teams may enter some or all):

- Autonomous Vehicle or Head-to-Head Racing
- Team Plans and Project Management
- Pitches and Presentations
- Promo videos
- Graphic Design Guides
- Marketing Posters
- Car Body/Obstacle Design
- Data-Driven Design Project Posters
- “TMEC” Ten80 Mechanical & Engineering Challenges (live, hands-on challenges announced at the event)

TEN80 RACING CHALLENGE

Students run a motorsports team, engineering a winning performance with a 1/10-scale electric RC car that is ready-to-run right out of the box, but can be set up over four million ways to race more successfully.

TEN80 AUTONOMOUS VEHICLE CHALLENGE

Students learn coding through physical computing, assembling a 1/16-scale car and adding sensors and code so it drives itself.

COMPETITION RULES

Registered teams can access the Competition Handbook and resources [here](#).

TEAM REGISTRATION

- Teams must be NSBE Jr. members in an actively chartered club.
- Teams enter the Middle (grades 6–8) or High School (grades 9–12) series; teams with any student in grades 9–12 must compete as a High School team.
- Teams enter one series: Racing Challenge or AV Challenge, each of which can also include the Online Points Race for an additional fee.
- Submit all applications and registrations by the deadlines.
- Attendance at the 2027 Annual Convention (Boston, MA, March 31–April 4, 2027) is required.
- Activate your team by registering or renewing with Future STEAM's Ten80 program: <https://www.ten80education.com/nsbe-teams/>
- Chapter advisors and coaches must pass an [NSBE Jr. Advisor Background Check](#).

APPLICATION PROCEDURE

- REQUIRED – Establish an active NSBE Jr. Club charter.
- REQUIRED – Register your team for the 2026–2027 season at www.Ten80Education.com.
- REQUIRED – Register for the Ten80-NSBE Finals via the Jotform provided by NSBE.

Teams must complete both applications in full and meet all team requirements.

TEAM RESPONSIBILITY AND EVENTS	TARGET TIME FRAME	RESOURCES (LINKS, ETC.)
Register With NSBE and Future STEAM/Ten80 (REQUIRED)	- Register your Ten80 team on www.ten80education.com by December 31, 2026. - Submit application to compete at NSBE's 2027 Annual Convention no later than Friday, January 8, 2027. Confirmation of participation will be sent by Friday, January 29, 2027.	NSBE's Annual Convention form opens later; an email will be sent. Not subscribed? Join here.
Acquire Access to Ten80 STEM Challenge Curriculum (REQUIRED)	September 1, 2026, through January 28, 2027	Link: Ten80 Registration
2026–2027 Ten80 Season Orientation and Training Webinars	October, November, January and February – Dates TBD	Link: Ten80 Calendar
Ten80 Points Race	Opens October 2026	Link: Ten80 Points Race
NSBE Fall Regional Conference (FRC) Ten80 Workshops	Region 1 Region 2 Region 3 Region 4	Workshops for prospective and current Ten80 teams and coaches/mentors. Contact Future STEAM for details.
Ten80-NSBE Finals at NSBE's 2027 Annual Convention (REQUIRED – Register with NSBE for the Convention and with Future STEAM for the competition.)	During the 2027 Annual Convention in Boston, MA, March 31–April 4, 2027.	NSBE's Annual Convention form opens later; an email will be sent. Not subscribed? Join here.



TRY-MATH-A-LON (TMAL)

TMAL OVERVIEW

Try-Math-A-Lon (TMAL) is a tutoring and academic competition program designed to foster good study habits for minority students, help prepare students for standardized examinations such as the ACT and SAT, and promote competition and good sportsmanship.

The TMAL competition is held between teams composed of high school students in grades 9–12. The purpose of the competition is to help prepare TMAL team members for success in STEM courses and standardized SAT/ACT testing.

TMAL consists of three components:

- 1.1. Regional Conference Competitions
- 2.2. Performance Assessment Test (PAT)
- 3.3. National Convention Quiz Bowl

TMAL rules should be used to guide coaches and advisors in preparing for all three components of the program. Coaches and advisors are encouraged to prepare their teams as early as possible and share TMAL preparatory materials with other mathematics, science, engineering, and technology professionals who may assist with competition preparation.

TMAL coaching may begin at the start of the academic year and continue through the National Convention.

TEAM REGISTRATION

Each TMAL team must meet the following requirements:

- Each team will consist of four students and one mandatory alternate, for a total of five students.
- Lower Division: Grades 9–10.
- Upper Division: Grades 11–12.
- Teams may consist of students from the same grade level.
- All team members must be active NSBE Jr. members.
- Chapter advisors and team coaches must complete a satisfactory NSBE background check. <https://nsbe.jotform.com/membership/background-check-request>
- Teams competing in the National Convention Quiz Bowl must attend the 2027 NSBE Annual Convention in Boston, MA.

Team registration for the 2026–2027 TMAL season will open October 2, 2026.

The team composition, division and membership requirements above carry forward the latest published TMAL rules.

TMAL COMPETITION COMPONENTS

Team registration for the 2026–2027 TMAL season will open October 2, 2026.

The team composition, division and membership requirements above carry forward the latest published TMAL rules.

EVENT 1: FALL REGIONAL CONFERENCE COMPETITIONS

TMAL competitions will be offered during the 2026 Fall Regional Conference season.

The Regional Conference Competitions provide Lower and Upper Division teams an opportunity to compete using the TMAL Quiz Bowl format and prepare for the National Convention competition.

Regional competitions will utilize a team-based, buzzer-style format. Teams will compete using grade-appropriate questions organized by category and increasing levels of difficulty.

FRC registration information and specific competition schedules will be communicated separately for each Region.

TMAL COMPETITION CURRICULUM

Questions will be written with the appropriate curricula for grades 9–10 and 11–12 in mind. Questions may challenge students beyond basic grade-level concepts and will increase in difficulty throughout the competition.

Lower Division — Grades 9–10

- Algebra I
- Geometry
- Numbers & Operations
- Data Analysis & Probability
- Problem Solving
- Pre-Calculus

Upper Division — Grades 11–12

- Algebra II
- Geometry
- Statistics
- Trigonometry
- Problem Solving
- Calculus

EVENT 2: PERFORMANCE ASSESSMENT TEST (PAT)

During the School Year

The Performance Assessment Test (PAT) evaluates NSBE Jr. high school members' college mathematics pathway aptitude and readiness while promoting critical-thinking skills and teamwork.

The PAT consists of two assessments:

1. Pre-Performance Assessment Test (Pre-PAT)
2. Official Performance Assessment Test (Official PAT)

Both assessments will be administered online prior to the National Convention.

Pre-PAT

The Pre-PAT will be distributed October 9, 2026, in conjunction with the opening of TMAL team registration.

Pre-PAT results must be submitted no later than December 5, 2026.

Official PAT

The Official PAT will be distributed December 15, 2026.

Official PAT results must be submitted no later than February 11, 2027.

PAT Administration

Each team advisor will be responsible for proctoring the assessments or securing a test proctor. A designated outside proctor should not be a parent or affiliated with the TMAL team.

Each team will have one hour to complete each assessment.

All teams participating in TMAL must complete both the Pre-PAT and Official PAT.

EVENT 3: ANNUAL CONVENTION QUIZ BOWL

On-Site During National Convention

All teams that successfully register for the National Convention TMAL Quiz Bowl and meet the program requirements will be eligible to compete. The National Quiz Bowl will be held during the 2027 NSBE Annual Convention in Boston, MA (March 31 - April 4, 2027).

The latest published TMAL rules allow all registered National Convention TMAL Quiz Bowl teams to compete rather than limiting the field based on PAT placement.

Quiz Bowl Categories:

Lower Division	Upper Division
• Algebra 1 • Geometry • Numbers and Operations • Data Analysis and Probability • Problem Solving • Pre-Calculus	• Algebra II • Geometry • Statistics • Trigonometry • Problem Solving • Calculus

- Each division will have six categories.
- Each category will contain five questions of increasing difficulty and point value.
- Teams will select a category and point value when it is their turn to control the board.
- Teams will select a category and point value when it is their turn to control the board.
- Up to four minutes may be allowed for more difficult questions.
- Each team will designate one representative to buzz in and provide or display the team's final answer.
- Final answers must be written clearly and in simplest form when applicable.
- Team representatives may not display their answer until instructed by the facilitator.
- A 30-second warning may be provided as the allotted response time approaches its conclusion.
- A correct response will add the designated point value to the team's score.
- An incorrect response will deduct the designated point value from the team's score.
- Board control will continue according to the established game order.
- The team with the highest score at the conclusion of the game wins.
- The game concludes when time expires or all questions have been selected.

APPLICATION PROCEDURE

TMAL team registration for the 2026–2027 program year will open October 2, 2026.

Each team interested in participating must submit the required TMAL application and meet all team eligibility requirements.

Separate registration may be required for participation in a Fall Regional Conference and the National Convention. Advisors are responsible for ensuring that their students are properly registered for the applicable NSBE conference in addition to completing the TMAL competition registration.

Teams intending to participate in the National Convention Quiz Bowl must complete the Annual Convention/TMAL registration requirements by the deadlines listed below.

The previous rulebook likewise treated the Quiz Bowl team registration and Convention TMAL registration as separate deadlines.

CRITICAL 2026–2027 TMAL DATES

For quick reference, the following target dates are established to support participation in NSBE's 2026–2027 TMAL program. Advisors and coaches should carefully review all registration, assessment, regional competition, and National Convention deadlines.

Team Responsibility and Events	Target Time Frame
Fall Regional Conference Competition (not mandatory)	Register for TMAL at FRCs using the link HERE. The deadline is 2-weeks before your Regional Conference. Attend 2026 Fall Regional Conference • Region I: Nov. 20-22, 2026 • Region II: Nov. 6-8, 2026 • Region III: Nov. 13-15, 2026 • Region IV: Nov. 20-22, 2026 • Region V: Nov. 13-15, 2026 • Region VI: Oct. 22-25, 2026
Performance Assessment Test (PAT) (mandatory to be eligible for reimbursement)	Pre-PAT Available on Oct. 9, 2026 Pre-PAT Results Due on Dec. 5, 2026 Official PAT Available on Dec. 15, 2026 Official PAT Results Due on Feb. 11, 2026
Annual Convention National Competition Quiz Bowl	National Competition Quiz Bowl / Annual Convention TMAL Registration deadline is January 8, 2027. A registration link will be shared via email and on NSBE Jr. Advisor calls. Subscribe to the mailing list here. National Competition Participation Confirmation by Feb. 1, 2026 2027 NSBE Annual Convention & National TMAL Quiz Bowl - March 31–April 4, 2027 — Boston, MA

PCI ANNUAL EVENTS

FALL REGIONAL CONFERENCES

Fall Regional Conferences (FRCs) provide a forum for discussion and information exchange between pre-college, collegiate, professionals, and corporate representatives at the regional level. Within the two-day event, each region encourages academic excellence and leadership development through various technical, cultural workshops, competitions, and career fairs.

All regions will host workshops and competitions. Regional Pre-College Initiative Chairs will notify active chapters in their region about specific events taking place during FRC.

ANNUAL CONVENTION

NSBE's Annual Convention provides inspiration, education, and connections to pre-college, collegiate, and professional attendees alike. Through inspiring keynotes, innovative discussions, educational workshops, hands-on opportunities, competitions, and much more, students will learn how to engage in NSBE's mission to increase the number of culturally responsible Black Engineers who excel academically, succeed professionally, and positively impact the community.

2027 ANNUAL CONVENTION

BOSTON, MA
MARCH 31 - APRIL 4, 202

To register and for more information about the Annual Convention, visit convention.nsbe.org

NATIONAL SOCIETY OF BLACK ENGINEERS

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