

NSBE.ORG/NSBEJR

NSBE Jr.

Pre-College Initiative

Advisor Guide

2023-2024







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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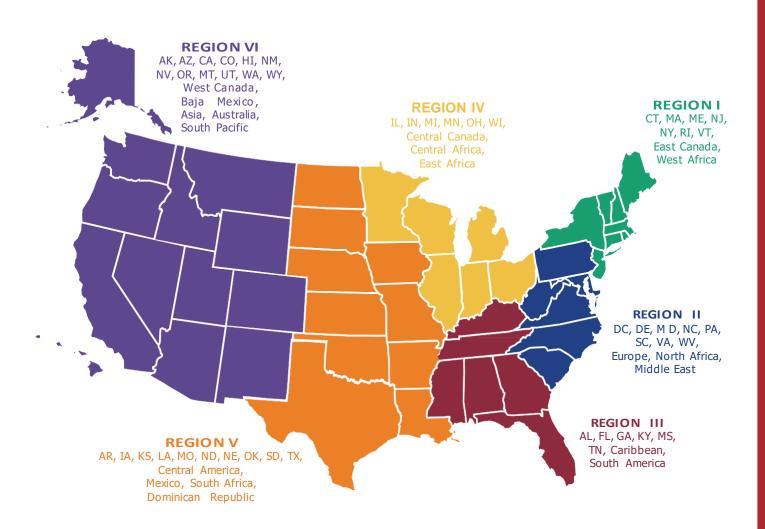
ABOUT NSBE

The National Society of Black Engineers (NSBE) was founded in 1975 by six Black engineering students at Purdue University nicknamed the Chicago 6. The original aspiration was to establish a student organization to help improve the recruitment and retention of Black engineering students. NSBE is now the largest student-managed organization in the US with more than 24,000 members.

NSBE is composed of more than 350 chapters on college and university campuses, 170 professional chapters nationwide and more than 290 NSBE Jr. Chapters. These chapters are geographically divided into six regions that span the entire USA and represent many other nations around the world. The NSBE mission is to increase the number of culturally responsible Black engineers who excel academically, succeed professionally and positively impact the community. For more information on NSBE, please visit nsbe.org.

Based in Alexandria, Virginia, the NSBE World Headquarters serves as the focal point for virtually all official NSBE business. NSBE's phenomenal National WHQ staff team aids and advises NSBE's student leaders as we strive to accomplish the greater work of NSBE.

NATIONAL SOCIETY OF BLACK ENGINEERS MAP OF REGIONS



ABOUT PCI

The Pre-College Initiative (PCI) Program is the focus of the NSBE effort to promote college, academics, technology and leadership to pre-college students. Our primary goal is to encourage students in grades K-12 to develop interest in science, technology, engineering and mathematics (STEM).

The mission of PCI is to lead the world in enhancing pre-college students' academic, technical and leadership skills to maximize their success in life. The 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.

ABOUT NSBE JR.

A vital component of the PCI program is NSBE Jr., which serves as the membership category for pre-college students and 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-Americans and other minority pre-college students, as well as influencing these students to become tomorrow's corporate executives, entrepreneurs and leaders. In this spirit, NSBE Jr. is the quintessential recruitment, teaching and preparation device for NSBE.

NSBE JR. MEMBERSHIP BENEFITS

- College Admissions Prep Obtain materials to prepare for the PSAT, SAT, and ACT.
- College Application Resources Receive college application information including how to get into college, financial aid information, etc.
- Event Registration Discounts Conferences and events such as the Annual Convention/PCI Mini Conference are held annually in March. Our conferences offer innovative programming designed to expose youth to STEM. Check out some highlights from NSBE's 45th Annual Convention here
- Leadership Development Develop leadership skills by serving in chapter and regional leadership roles.
- Membership & Tutoring Opportunities tp be mentored and tutored by College Students or Technical Professions currently working in a STEM field.
- Networking Opportunities Meet other NSBE Jr Collegiate and Alumni members from around the world.
- Scholarship & Awards Awarded to NSBE Jr. Members in high school who have excelled academically
 and expressed an interest in pursuing a career in engineering and related fields.
- **STEM Programs & Competitions** Participate in programs such as the Try-Math-A-Lon, Math Video Challenge, NSBE Jr Explorer Technical Innovation Competition, and various engineering design and robotics competitions. An overview of these programs can be found on the next two pages.

NSBE JR. PROGRAMS & COMPETITIONS

In fulfillment of the NSBE objective to "stimulate and develop student interest in the various engineering disciplines," the following programs and competitions are geared towards precollege students. Additional details, registration links, and deadlines for these competitions can be found in the NSBE PCI Rulebook.

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Name	Grade Level	Description	Team Size	Experience Level	Registration	Materials
FIRST® LEGO® League Explore	K-4	Teams explore real-world problems and learn to design and code as they create unique LEGO® solutions. This is not a competition. Instead, a showcase is held at the Annual Convention.	2-6	New	\$99	WeDo 2.0 Set \$249.95
VEX IQ Challenge	3-8	Teams design and build a robot to play with other teams in a game-based engineering challenge. NSBE's VEX IQ Tournament is held at the Annual Convention.	2+	Intermediate	\$99	Starter Kit \$279.99 Super Kit \$329.99
FIRST® LEGO® League Challenge	4 -8	Teams build and program LEGO® based robots to complete tasks on a thematic playing surface and participate in a research project to identify and solve a relevant real-world problem. NSBE's championship takes place at the Annual Convention.	2-6	Experienced	\$150	Challenge Set \$75 EV3 Robot Set \$469.95 EV3 Expansion Set \$101.95
Future City	6 -8	Teams design a virtual city using SimCity, research and write up their solution to a citywide issue, and build a scale model of their design. NSBE's Future City Competition takes place at the Annual Convention.	4-30	Intermediate	\$25	City Model is limited to \$100
MATHCOUNTS	6 -8	Students spend the year completing thought-provoking, non-routine, fun math problems that support them in becoming better problem solvers. Participants complete a circuit of math exams at NSBE's Annual Convention.	4	New	\$0	MATHCOUNTS Handbook
Math Video Challenge	6 -8	Teams create a video that teaches the solution to one of the problems from the MATHCOUNTS Handbook and demonstrates the real-world application of the math concepts used in the problem.	4	New	\$0	MATHCOUNTS Handbook

Middle/High School							
Name	Grade Level	Description	Team Size	Experience Level	Registration	Materials	
NSBE Jr. Explorer Technical Innovations Competition	6 -12	In this national science fair program, teams explore the many applications of science through research projects and presentations, which are judged and scored at NSBE's Annual Convention.	2-3	New	\$0	Purchase supplies for research	
Ten80 Student Racing Challenge	6 -12	Teams use model radio-controlled cars and mimic professional motorsport teams as they learn the fundamentals of problem solving, data and mechanical systems, project management, marketing and business. NSBE's Ten80 Challenge finals are held at the Annual Convention.	4-15	Experienced	\$597	1-car Base Kit \$1,461	

High School							
Name	Grade Level	Description	Team Size	Experience Level	Registration	Materials	
KidWind Challenge	9 -12	Teams build a small turbine to produce as much power as possible, and then consider the best construction techniques and the most innovative design to make their turbine operate. NSBE's KidWind Challenge competition takes place at the Annual Convention.	2-4	Intermediate	\$0	Advanced Wind Experiment Kit \$149	
Try-Math-A-Lon	9 -12	Teams earn points by engaging in various math activities that groom them for success in STEM courses, help prepare them for the ACT and SAT, and promote good sportsmanship. Participants compete year-round and advance to a final competition at the Annual Convention. *Each team is required to consist of four students and one mandatory alternate.	4*	New	\$0	No supplies necessary	
VEX Robotics Challenge	9 -12	Teams build innovative robots and compete in a variety of matches during the school year as they learn skills in engineering, project management, critical thinking, and perseverance. NSBE's VEX Robotics championship is held at the Annual Convention.	4-10	Experienced	\$150	Starter Kit \$439 Competition Kit \$849	

NSBE JR. ADVISOR ROLES & RESPONSIBILITIES

- Provide a safe space in which students can learn, explore, and grow.
- Hold chapter meetings 1 4 times a month.
- Plan engaging events and activities for students to participate in.
- Provide opportunities for academic enrichment.
- Keep parents and guardians up to date with chapter activities.
- Share resources, scholarships, and other opportunities with students and parents.
- · Create and adhere to chapter budget.
- Attend monthly NSBE Jr. Advisor webinars.
- Maintain communication with NSBE PCI team.

ESTABLISHING A NSBE JR. CHAPTER

NSBE JR. CHAPTER REQUIREMENTS

To charter and renew a NSBE Jr. Chapter, the following criteria must be met:

- Have at least five active (paid) NSBE Jr. members.
- National NSBE Jr. membership dues are \$5 annually. A chapter may also collect additional chapter dues to cover chapter costs.
- Have the following chapter executive officers assigned and active in <u>NSBEconnect</u>.
 Instructions on how to assign chapter officers using NSBEconnect can be found <u>here</u>.
- At least one Advisor (Chapter advisor must be an adult. We recommend two.)
- President
- Vice President
- Secretary
- Programs Chair
- Treasurer

If your chapter becomes inactive, log in to your NSBEconnect account and make sure that the above criteria are met. Once you do that, the system will automatically recognize you as active. Each advisor must have a profile in the NSBEconnect system. If you do not have a profile, one will be created for you. Email membership@nsbe.org and express interest in being an advisor for a specific chapter. A confirmation email will be sent once the process is complete. We encourage advisors to become NSBE members; however, it is not a requirement.

CHAPTER CHARTERING

To begin the chapter charter process, petition a NSBE Jr. chapter using this.link. Chapter petitions are reviewed and approved by NSBE World Headquarters Membership Staff. Each chapter must complete all relevant chapter information. This information includes, but is not limited to, chapter name, address, phone number, and Chapter Constitution. A sample Chapter Constitution can be found here. For questions regarding the chapter charter process, contact the Membership Team at NSBE World Headquarters at membership@nsbe.org or 703.549.2207 prompt 1.

ONLINE CHAPTER MANAGEMENT TOOLS

Chapter officers can update officers on their own and view/pay invoices for members of their chapter using NSBEconnect.

Please note that you will not be able to access these features unless you are an officer of your chapter. You may have one of your fellow officers update your status or you may contact membership@nsbe.org for assistance.

Click <u>here</u> to access a full step-by-step guide for updating chapter officers and paying invoices.

REGISTERING NSBE JR. MEMBERS

Open enrollment for NSBE Jr. Registration takes place from May 1st – September 30th. Students can be registered by a parent or an advisor. Membership fee payments are due at the time of enrollment.

- STEP 1: Click here to begin the "New User Account" application on NSBEconnect.
- STEP 2: Select member type (NSBE Jr.), region and chapter. If you have not connected with a chapter, just yet please select "Member-at-large" under your region. If you choose not to be affiliated with a chapter in your local area, you will be consider a "Member-At-Large," classified by your geographical region. Member "At-Large" receive the same national benefits as those who belong to a chapter.
- STEP 3: Continue through the informational prompts until you arrive at the payment screen.
- STEP 4: Once you complete your payment information click "Submit." You will receive confirmation on the screen and via email.

BUILDING YOUR CHAPTER

CHOOSE YOUR CHAPTER FOCUS

Chapter advisors are responsible for choosing their chapter's overall area of focus, which can range from STEM competitions to field trips to academic enrichment. Once you establish your chapter focus and structure, you can begin to develop chapter activities. Here are examples of focus areas:

- STEM Activities & Projects
- NSBE Jr. Competitions
- Academic Enrichment
- Leadership Development
- Community Outreach
- College Readiness and SAT/ACT Prep

ESTABLISH YOUR CHAPTER STRUCTURE.

- How often will your chapter meet?
 - We recommend that chapters meet 1-4 times a month. The length of each chapter meeting depends on the activities that you have planned. Some chapters meet after school while others meet on the weekends.
- What activities will you plan for the students?
 - Your chosen focus area will heavily influence your chapter activities. It is also a good idea to allow students to contribute ideas for chapter activities.
- · Who will run the chapter meetings?
 - Although advisors typically run chapter meetings, chapter activities can also be run by students, STEM professionals, or parent volunteers.
- What kind of support will you need from parents, the school, or the community?
 - Your chapter may need chaperones, carpool drivers, competition coaches, guest speakers and fundraising support.

FORMULATE A PLAN FOR SUSTAINING YOUR CHAPTER

- How will you recruit new members?
 - Host interest meetings and outreach events at your school or local community center.
- How will you promote and share chapter events and activities?
 - Use flyers and social media to spread the word.
- How will you know about events, opportunities, resources and scholarships?
 - Follow NSBE and NSBE Jr. on social media.
 - Subscribe to NSBE Jr. advisor email blasts.
 - Attend monthly advisor webinars.
- How will you fund chapter trips and activities?
 - Outline a chapter budget based on the activities, events, and competitions that you plan to host.
 - Collect membership dues to cover chapter costs.
 - Keep an eye out for NSBE Jr. funding opportunities.

SUGGESTED FIRST YEAR OUTLINE

SEPTEMBER

LEARNING ABOUT NSBE & ORGANIZING YOUR YEAR

The first few meetings should focus on learning about NSBE as an organization and setting the goals and visions for your year. Learning the NSBE Mission Statement, knowing the basic history and reasons NSBE was formed, knowing the National Chair, what Region the chapter is in, etc. (It's tradition to recite the Mission at every chapter meeting.) Students should also start to become familiar with handling "chapter business": creating or learning procedures for votes or other decisions for the chapter. NSBE tries to build leadership skills along with exposure to STEM. We encourage you to include your students in decisions for the chapter.

This month can be used to sign students up for competitions and register for your Fall Regional Conference (FRC). If you are considering attending National Convention, this is also the best time to begin to register. Rates are cheapest further out from the event date.

OCTOBER - DECEMBER

PRACTICE AND PROGRAMS

This is a time to begin to work on chapter activities. Participate in or host STEM-related events, such as a career day, college visits, etc. The chapter can also work on projects and compete inhouse to prepare for next year. Even if deadlines for NSBE Jr. competitions have passed or you are not ready to participate, you may still be able to download the projects for practice.

November is the time for Fall Regional Conferences (FRCs). FRCs are an opportunity to meet other NSBE Jr members, participate in workshops, and prepare for competitions. Fall Regional Conferences are held per Region, and locations rotate throughout each region.

JANUARY - MARCH

FOCUS AND REFINE

Continue general chapter activities. (Homework review, guest speakers, projects, etc.) This may be a time of standardized testing for school-based chapters. Chapter efforts can focus on math and science concept review and over all test prep.

March is the time for Annual Convention. When the chapter is established, attending may be an option. This is where many competitions take place, as well as workshops (for Advisors and Students), luncheons, social events, and award shows.

APRIL & MAY

CLOSING THE YEAR

In the closing months of the school year, begin to prepare for the coming school/membership year. This would be a time to think about officers for the upcoming year, competitions, etc. Some chapters choose to have an end-of-year outing or awards ceremony to close out the year. This time can be used to evaluate what was done in the first year and begin to build for the following year.

JUNE - AUGUST

PREPARATION AND TIME OFF

Most chapters are not active in the summer months. If the students are not active, this is when advisors should begin to prepare for the coming year. Look for emails from NSBE programs for dates and information for the upcoming school year.



NSBE JR. SCHOLARSHIPS

NSBE provides various scholarships to our members through our NSBE and Corporate Scholarship Programs. Individual scholarships range in value from \$500 to \$5,000. Scholarships promote academic achievement and not all have a GPA requirement, so we strongly encourage all members to review the listing of scholarships available for application at apply.nsbe.org.

One copy of the student's **official** transcript or a GPA verification letter confirming their current cumulative GPA with their registrar's signature is required for all scholarships.

GPA VERIFICATION

NSBE Jr. members are required to verify their GPA twice a year: once in the Spring and again in the Fall. Members will self-report their GPA in their NSBEconnect profile. Chapter advisors will then approve it through the Educational Institution Portal in NSBEconnect. Please make sure that you are registered for access to the portal before attempting to verify your members' GPA. Click heme-to-access a full step-by-step guide for verifying GPAs for your chapter members.

REGISTERING FOR GPA VERIFICATION ACCESS

- STEP 1: Register for GPA Verification access using this form.
- STEP 2: WHQ will assign advisor access to the Educational Institution Portal.
 - If you do not have an account in NSBEconnect, an account will be created for you. There is no membership fee for advisors.
- STEP 3: Receive an email with instructions to access the portal.

VERIFYING CHAPTER MEMBER GPAS

- STEP 1: Log in to your NSBEconnect account.
- STEP 2: Click the Educational Institution Portal tab.
- STEP 3: You will see a list of students and their self-reported GPAs.
 - If the GPA is correct: Click the box that says, "Approve/Update"
 - If the GPA is incorrect: Change it before clicking the "Submit" button.
- STEP 4: Click the approve box or edit the GPA in the official GPA column.

Incomplete and unsigned forms WILL NOT be accepted. NSBE WHQ no longer accepts emailed transcripts, mailed transcripts, unofficial transcripts or unsigned GPA Verification forms.

APPLYING FOR A SCHOLARSHIP

Scholarships are available here. To view and apply for scholarships, you must:

- Renew your NSBE membership for the year.
- Have a verified GPA in your membership profile.
- Complete and update the following fields in your membership profile: education level, major, citizenship status, chapter and region.

If you are unable to access scholarship applications, please review your NSBEconnect profile to ensure the information above is updated. Please email questions about particular scholarships to scholarships@nsbe.org.

RAISE.ME MICRO SCHOLARSHIPS

RaiseMe is a platform that helps 9-12th grade students prepare for college by earning scholarships for their academic, extracurricular and leadership achievements. With over 330 colleges and universities on its platform, RaiseMe is also a great resource to help students find the college that is the best fit for them.

Students can register under NSBE and build their profiles as early as 8th grade! If you would like RaiseMe to create a page for your NSBE Jr. chapter, please submit an application here.

ANNUAL EVENTS

Participating in NSBE's annual events will add depth to your chapter's NSBE experience and bring your students closer to seeing themselves as engineers. Students will benefit from:

- Seeing the goals and purpose for the year come to life
- Meeting college students and professionals that look like them
- Getting exposure to activities not possible at the chapter level
- Gaining much better understanding of the overall NSBE organization

FALL REGIONAL CONFERENCES

NSBE Fall Regional Conferences (FRCs) are two-day events that take place in your region. FRCs provide the opportunity for NSBE Jr. students and advisors to connect with other local PCI chapters and participate in competition scrimmages, a science fair, and special workshops.

ANNUAL CONVENTION

NSBE's Annual Conventions take place in March and are typically held in a new city each year. Over the course of three days, NSBE Jr. attendees can participate in STEM competitions, banquets, luncheons, college prep workshops, entertainment activities, awards ceremonies, and more.

Advisors can register both individuals and groups under their registration. The Registration form gives the option to add other attendees to your registration. Their first and last name as well as email address are required to add their registration. While membership is not required to attend the event, members do receive a discounted rate.

For more information on NSBE's upcoming convention (registration info, pricing, agendas, etc.), visit convention.nsbe.org.

HELPFUL LINKS & RESOURCES

STARTING A CHAPTER

- Chapter Charter Application
- NSBE Jr Toolkit

NSBE JR. OUTREACH

- NSBE Jr. One-Pager
- NSBE Jr. Outreach Video
- NSBE45 Highlight Video

NSBE JR. CHAPTER DEMOGRAPHIC SURVEY

Chapter Demographic Survey

GPA VERIFICATION

- GPA Verification Access Request Form
- GPA Verification Process Instructions

SCHOLARSHIPS

- Raise.Me Chapter Registration
- NSBE Scholarships & Awards

PROGRAMS AND COMPETITIONS

NSBE PCI 2020-2021 Competition Rulebook (23 – 24 Rulebook Updates available in August)

SUMMER PROGRAMS

Summer Engineering Experience for Kids (SEEK) Summer Program

Contact Information

NATIONAL SOCIETY OF BLACK ENGINEERS (NSBE)

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Email: pci@nsbe.org

Follow NSBE on National Website | Twitter | Facebook | YouTube | Instagram

Follow NSBE Jr. on NSBE Jr. National Website | NSBE Jr. Twitter | NSBE Jr. Instagram

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