

# Society of Women Engineers

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2021 Call For Nominations

SWENext Awards

## ***Individual***

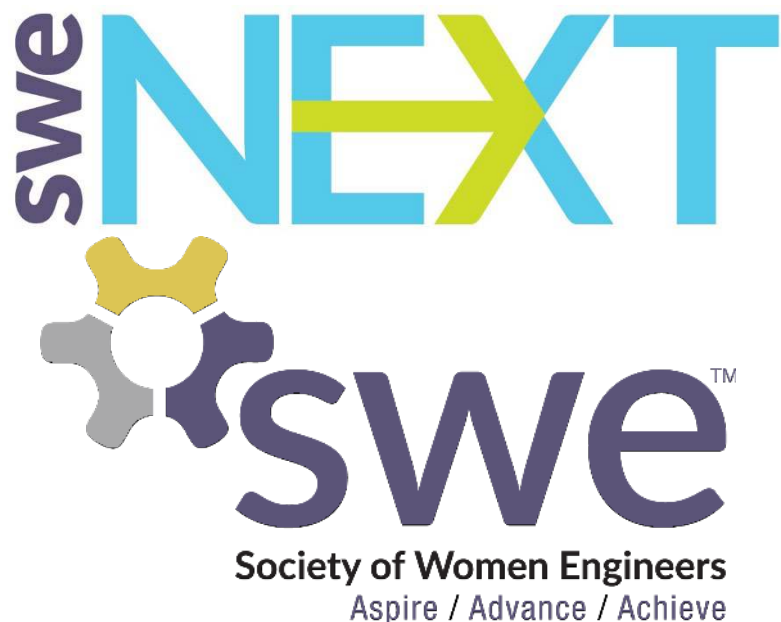
*SWENext Community Award*

*SWENext Global Innovator Award*

## ***Group (SWENext Clubs)***

*SWENext Clubs Best Practices*

*SWENext Clubs Challenge*



## General Information

The Society of Women Engineers strives to recognize the successes of SWENext students and SWENext Clubs that do exceptional work in developing a community for students to explore engineering and other STEM fields. The SWENext mission is to:

- Empower females under the age of 18 to prepare for careers in engineering and technology.
- Provide programming to help females under the age of 18 to develop leadership skills and self-confidence to succeed in a career in engineering and technology.
- Expand the image of the engineering and technology professions as a positive force in improving the quality of life.
- Demonstrate the value of diversity and inclusion.
- Provide programming to empower females under the age of 18 to become advocates for peers and younger girls.

Inside this packet you will find information on the awards offered by the Society of Women Engineers for SWENext students and SWENext Clubs who are working to further the SWENext mission. An 'Application Checklist' is included that details the requirements needed to fully complete an application package. Please contact [awards@swe.org](mailto:awards@swe.org) if you have any questions. Note: you may apply for more than one award.

### **How to Complete the Application:**

- Fill out the appropriate 'Application' online:
- **Submit the application online by June 14th.**
- **Packages MUST BE RECEIVED by 11:59 PM, Central Time.**
- No exceptions will be made for late packages.

### **Important Information:**

- All applications are to be submitted electronically through the application tool.
  - If sent to any other address, packages cannot be forwarded for you. It is your responsibility to submit applications per these guidelines.
- **Incomplete** applications that **do not meet the award requirements** will be disqualified.

### **Notifications:**

- Recipients will be notified via email by early August.
- Recipients will receive communication via parent/guardian contact provided in the application due to data privacy guidelines for minors.
- Recipients do not need to be present to receive the award.

# SWENext Community Award

## Objective:

- This Award Program emphasizes the impact SWENexters can have in their communities to solve real-world problems. This award also stresses the interconnectedness of the SWE Community and gives awardees a chance to interact with SWE members, companies, and colleges.
- There will be up to twenty-five recipients. One poster will be declared the ultimate individual winner and one ultimate team winner based on the judges' best scores.

## Eligibility:

- SWENexters who are entering Grades 9, 10, and 11 (in the fall). Girls can submit a poster as individuals or in teams of two. Individuals and teams will be judged separately.

## Application Checklist:

The following information constitutes a complete nomination:

- A completed application submitted online: <https://app.smarterselect.com/programs/71688-Society-Of-Women-Engineers>
- A completed application form:
  - SWENext student information
    - Are you entering this competition as an individual or team of two?
    - Name
    - Email
    - SWENext membership
    - Grade in the upcoming fall
    - Name of High School in the upcoming fall
  - Parent/Legal Guardian information:
    - Name
    - Email
    - Cell phone number
    - Home phone number
    - Mailing address
  - SWENext additional student information (if part of a team)
    - Name
    - Email
    - SWENext membership
    - Grade in the upcoming fall
    - Name of High School in the upcoming fall
  - Parent/Legal Guardian information (of second student if part of a team):
    - Name
    - Email
    - Cell phone number
    - Home phone number
    - Mailing address
  - Award submission

▪ **Create a poster to address the following Awards Prompt: Redesign the Indy500 experience!**

▪ **Rationale**

*Indiana is known for its automotive manufacturing industry, its agriculture, and its love of sport - basketball and car racing to be specific! Indiana has set milestones in all these industries over the years. This year marks the bicentennial of Indianapolis and the 110th season of the Indy 500. As we consider these great milestones, we must also address the consequences of advancement and growth in these sectors - farm waste, environmental justice, climate action, sustainability, forest protection, river/lake protection. It is largely the job of environmental engineers to work with organizations and legislature to address these concerns creating solutions that can benefit all stakeholders.*

*As Indianapolis prepares to celebrate its bicentennial, one of the main areas of concern is the level of environmental pollution in various forms in the city and around the state. The Indy500 is one of the largest*

exhibitions of automotive prowess in the world - a showcase for American automotive and racing innovation. Attendance at the events is over 300,000 people annually and have a carbon footprint of over 30 million pounds of carbon dioxide a year from traffic and travel to the event. This contributes to smog, air pollution and sanitation issues. The race cars themselves emit fumes and use a lot of fuel at events. Indiana is poised to take the lead on acceptance of electric vehicles and promoting environmental social justice via the popularity of Indy500.

- **Prompt**

*Environmental engineers are consulted to figure out how to address climate/environmental issues dealing with construction, architecture, traffic, energy, and conservation of resources. Imagine you were placed on a team of **environmental engineers**:*

***In what ways can you help reduce Indiana's carbon footprint through the redesign of the Indy500 experience so that they can continue to provide entertainment without causing more damage to the environment?***

*Choose **ONE area** to focus on from the list below. Investigate how the logistics around Indy500 events affect or are affected by this area:*

*Sustainable Energy – charging stations, cost of gas vs electric, other costs*

*Sustainable Transportation – electric cars, traffic infrastructure*

*Environmental Justice – social/cultural norms shifts, behavior*

*Toxic Exposure Reduction – pollution, emissions*

*River, Lake, Drinking Water Protection – aspects of climate change, waste management*

*In your presentation poster:*

- *Provide the prompt question, background information on your area of focus, including statistics, and sources*
- *Provide 2-3 proposed solutions*
- *Discuss any possible obstacles to solutions - legislative, social, economic, cultural*
- *Offer 2-3 next steps to move your solutions forward*
- *Be INNOVATIVE and CREATIVE!*

- **RESOURCES:**

<https://indyturns200.com/>

<https://www.indystar.com/story/news/2018/04/19/how-bad-indianas-environment-actually-according/525003002/>

- **Do you want to be considered to be a SWENext Influencer? If so, add links for your social media accounts.**

- Yes
- No

**Award Judging Guideline:**

Your poster should include:

Your name, the Problem Statement, Background on the Problem, including but not limited to, research, personal observations and experience, Potential Solutions, and Suggested Next Steps.

# SWENext Global Innovator Award

## Objective:

- The SWENext Global Innovator Award recognizes the outstanding young women shaping the future of SWE by developing an engineering identity in themselves and others. Award recipients exemplify intellectual curiosity, enthusiasm, and leadership in the STEM community. These students demonstrate a commitment to bettering the lives of women in STEM, volunteer in outreach initiatives, and are pursuing a career in engineering. This is the ultimate award a SWENexter can receive and is comparable to the Outstanding Collegiate Award.
- **All Global Innovator Award recipients will receive additional leadership opportunities provided by SWE HQ and the Student Programs Committee.**
- There will be up to six recipients. Ten additional recipients will receive an “Honorable Mention”.

## Eligibility:

- SWENexters who are entering their senior year of high school are eligible (Grade 12 in the fall).
- Applicants must be in SWENext for at least one year.
- Applicants must identify as female and be a SWENext member.

## Application Checklist:

The following information constitutes a complete nomination:

- A completed application submitted online: <https://app.smarterselect.com/programs/71689-Society-Of-Women-Engineers>
- A completed application form:
  - SWENext student information
    - Name
    - SWENext membership
    - Email
    - Name of High School in the upcoming fall
  - Parent/Legal Guardian information:
    - Name
    - Email
    - Cell phone number
    - Home phone number
    - Mailing address
  - Leadership information:
    - How long have you been a SWENext Member?
    - Are you a member of a SWENext Club?
    - Are you or have you ever been a SWENext Club Officer or a leader of an engineering club/organization? If yes, please list your roles. If none, please write N/A.
    - Which field of engineering are you interested in? Select up to two options.
    - What, if any, previous SWENext awards have you won (Select all that apply)?
      - SWENext Global Innovator award
      - SWENext Community award
      - SWENext Clubs Challenge award
      - SWENext Clubs Best Practice award
  - Award submission
    - Essay 1 (Maximum 200 words):
      - Describe your involvement with SWENext. Have you participated in a SWENext Club, at a SWENext event, a talk, maybe a design challenge, or maybe an online webinar? What steps have you taken to become more involved in the SWE community?
    - Essay 2 (Maximum 200 words):
      - How have you used engineering principles in your life? Some examples of engineering principles would include: describing how you have developed a technical skill, using the engineering design process, or tackling some sort of project using problem-solving skills.
    - Essay 3 (Maximum 200 words):

- How has your involvement in SWENext and your use of engineering principles in your life relate to the work you have done in your community? We want to know how your engineering ambitions translate to the service you do to improve the lives of those around you?
- Essay 4 (Maximum 200 words):
  - How are you a leader at your school or in your community? How do your leadership roles connect to your passion for engineering and STEM? We are looking for more than just the next best engineer; we want someone who demonstrates the ability to lead as well.
- Video:
  - We want to see the work you do in action. **Applicants need to emphasize SWE/SWENext participation in their videos.** Create a video that is less than 3 minutes long. Note: a video longer than 3 minutes will **DISQUALIFY** your application.
    - **Helpful video resources:**
      - <https://www.powtoon.com/> (Create animated videos and presentations)
      - <http://igamemom.com/explain-everything-screencast-digital-storytelling-presentation/> (Design and video production app for tablets)
      - <http://tinytake.com> (Create videos on your computer screen and with your webcam)
    - Many public libraries have computer access and rentable filming equipment. Check your local public library for details.
    - Quality is not the ultimate deciding factor but please use the resources available to you to submit your best work.
    - **Your video submission should highlight:**
      - Information about you and your engineering field of interest
      - Your passion and excitement for engineering
      - Examples of how you are developing a STEM identity in yourself and other young women
      - Your involvement in SWENext, your community, and your leadership roles
      - Your future accomplishments/plans
      - Please upload a copy of the video to a file sharing service like google drive or dropbox and provide a shareable link below. Note: If uploading to google drive, make sure the sharing permissions are set to “viewable for anyone with a link.”

**Award Judging Guideline:**

Your essays should include examples of your involvement in SWE and SWENext, examples of using engineering principles, examples of your STEM-related community work, and examples of your STEM leadership.

Your video should include Information about you and your engineering field of interest, your passion and excitement for engineering, Examples of how you are developing a STEM identity in yourself and other young women, your involvement in SWENext, your community, and your leadership roles, and your future accomplishments/plans.

# SWENext Clubs Best Practices

## Objective:

- Recognize outstanding SWENext Clubs around the world and to provide further opportunity for students to be involved in the SWE Community by introducing them to the annual conference and awards. The goal of the awards is to recognize outstanding SWENext Clubs on a global-scale and to obtain information on “best practices” that SWENext Clubs are implementing to share with the larger SWENext Clubs program to advance the program as a whole. This specific best practice award is to recognize SWENext clubs that have worked to prepare their members for engineering in college.
- This award will recognize Best Practice in College Preparation.
- One winner will be selected for the category of College Preparation.
- Please note: There will be one SWENext Club recipient (up to 5 students and 1 adult).

## Eligibility:

- Your SWENext Club must be a registered SWENext high school club (grades 9-12).
- Your SWENext Club Counselor must have an active SWE Membership.

## Application Checklist:

The following information constitutes a complete nomination:

- A completed application submitted online: <https://app.smarterselect.com/programs/71690-Society-Of-Women-Engineers>
- A completed application form:
  - SWENext Club Information
    - Club name
    - City and State
    - Founding year
    - Total number of Club Members (upcoming School Year)
    - Grade levels the club members will be in the Fall. (Students are required to be in High School in the fall to apply for this award.)
  - Counselor Information
    - Name
    - SWE membership ID number
    - Email address
    - Phone number
    - Mailing Address
  - Student Point of Contact information
    - Name
    - Affiliation with Club/Club Officer Position
    - Email
    - Grade this Upcoming Fall
  - Award submission
    - Please tell us a little bit about your SWENext club (Location, when it was founded, grade range, school/community organization affiliation, number of members, club mission or goals, etc.). [Max 100 words]
    - Please detail the specific college preparation event(s) your club hosted between August 2020 and May 2021 and relate it to the following topics: Application Process, Choosing Your Major, Financial Aid, Resumes or Scholarships. Examples of events could include Q&A on the college application process, panel discussion with current engineering college students, hosting STEM professionals as guest speakers, 101 on SAT/ACT, etc. Please use specific examples (i.e. statistics from surveys, specific member successes within any of the topics, testimonials from club members) to explain how the events have helped your members in their college process. [max 200 words]
    - Please detail any additional resources your club has created or challenges your club has hosted to promote college preparedness within your club. Examples can include scholarship tips, personal statement tips, social media challenges, etc. Please explain how the resources or challenges have helped your members in their college process. Please use specific examples (i.e. statistics from surveys, specific member successes within any of the topics, testimonials from club members). [max 150 words]
    - How many students participated in your events and how many volunteers helped run your events (including club members and others)? Did you engage with SWE members, a SWE professional or a

SWE collegiate section to help plan or run any of the events? If so, how did you engage with them and how many SWE members participated? [max 150 words]

**Award Judging Guidelines:**

Your short essay questions will be judged on how thorough each part of each question was answered, if your club's passion and goal for helping your members prepare for college shines through your answers, and the overall quality of your efforts (i.e. creating a variety of events within the different topics mentioned above, measurable successes like from a post-event feedback survey, clear strategies to prepare your club members for engineering in higher education, etc.). You will receive additional points if you collaborated with Collegiate or Professional SWE members to do outreach events.



# SWENext Clubs Challenge

## Objective:

- The goal of this award is to recognize an outstanding SWENext Club that has developed a hands-on STEM activity for elementary or middle school-aged students to do at home. Additionally, the goal is to have the students participating in this challenge practice their own curiosity through STEM-related events and/or activities. Also, we hope that SWENext Clubs forge virtual connections with their local SWE Sections and prepare to form more connections in the future.
- There will be one SWENext Club recipient (up to 5 students and 1 adult).

## Eligibility:

- High school aged (9-12<sup>th</sup> graders) SWENext Clubs are eligible to participate.
- Your SWENext Club Counselor must have an active SWE Membership.

## Application Checklist:

The following information constitutes a complete nomination:

- A completed application submitted online: <https://app.smarterselect.com/programs/71691-Society-Of-Women-Engineers>
- A completed application form:
  - SWENext Club Information
    - Name
    - City and State
    - Club members need to be in high school in the fall. Please enter the total number of club members participating in the challenge (K-12).
    - Please enter each club member's first and last name who is participating in the challenge.
    - Please enter the grade level in the fall of each club member participating in the challenge.
    - **Has your SWENext club previously received a Clubs Challenge Award? Yes/No**
  - Counselor Information
    - Name
    - SWE membership ID number
    - Email address
    - Phone number
    - Mailing Address
  - Student Point of Contact information
    - Name
    - Affiliation with Club/Club Officer Position
    - Email
    - Grade this Upcoming Fall
  - Award submission
    - Video:
      - The theme of WE21, SWE's annual conference in Indianapolis, IN is 'Aspire to Inspire'. With that in mind, SWE is challenging SWENext clubs to consider who or what has inspired them in their STEM journey and how they are paying it forward by inspiring the future generation of engineers in their community.
      - **Create a 5-7 minute video that:**
        - **1) Explains how your SWENext Club was inspired:** This should provide an overview of your SWENext Club (location, number of members, grade levels, etc.), how it was founded, and detail your club's source of inspiration.
        - **2) Explains how your club is paying it forward in the community:** This part of the video should detail what specific STEM events or programs your club has hosted (such as outreach, mentorship, etc.) for your school or community and specific examples regarding how your community has benefitted from these events or programs
      - **In addition to the video, help inspire other clubs:** Create a resource/aid (graphic, separate (1-3 minute) video tutorial or step by step guide, etc.) that details how you created and organized your most successful STEM event or program in an effort to inspire other clubs!
      - **Bonus points:** Bonus points will be awarded for Clubs that worked with the Professional or Collegiate SWE members to inspire others. Explain how your Club connected virtually or

physically and share how the Clubs Challenge helped prepare you to form more virtual connections in the future.

- Helpful video creation resources:
  - <https://www.powtoon.com/> (Create animated videos and presentations)
  - <http://igamemom.com/explain-everything-screencast-digital-storytelling-presentation/> (Design and video production app for tablets)
  - <http://tinytake.com> (Create videos on your computer screen and with your webcam)
- Many public libraries have computer access and rentable filming equipment. Check your local public library for details.
- Quality is not the ultimate deciding factor but please use the resources available to you to submit your best work.
- Please upload a copy of the video to a file sharing service like Google Drive or Dropbox, or YouTube. Ensure that your sharing settings on the video are "Public" or "Anyone can view."

**Award Judging Guidelines:**

**Your video must be within 5-7 minutes. If your video is not within this time frame, your submission will be disqualified.** Your video submission will be judged on how thorough your club details each aspect of the above prompts (for the video and resource/aid), the quality of your efforts to inspire others within your community, the effectiveness of your aid to assist other clubs in executing similar events, the overall passion and enthusiasm of those in the video, and the video quality itself. You will receive bonus points if you collaborate with your Collegiate or Professional SWE members to address any of the aspects of the video prompts.