



# NORTHROP GRUMMAN FOUNDATION

## EXCELLENCE IN ENGINEERING EDUCATION AWARD

### PROGRAM SUMMARY

This award is to recognize excellence in the field of engineering education as outlined in the NSTA Position Statement on the Next Generation Science Standards (NGSS), Section II Conceptual Shifts in the NGSS.

### AWARD

The awardee receives a cash prize of \$3000, and \$2000 to attend the NSTA National Conference on Science Education. In addition, the awardee's school receives \$5000 for classroom materials and equipment. The recipient of the Award will be honored during the annual Awards presentation. One award may be given per awards cycle.

### ELIGIBILITY

The applicant must be a K-12 public school science/technology teacher. Individuals must have a minimum of 3 years teaching experience. Awardees will have exhibited excellence in engineering science education.

### CRITERIA FOR JUDGING

Excellence of contribution of service and leadership in engineering science education, is the main criterion for selection of the recipients. Among the types of outstanding service that are considered by the committee are:

- ★ Active leadership in engineering education
- ★ Foster observation, investigation, and creative thinking
- ★ Promote scientific inquiry ★ Provide opportunities to connect science educators and their students with the broader engineering science and technology community
- ★ Provide students with interdisciplinary, multicultural, and multi-perspective viewpoints to demonstrate how engineering transcends STEM boundaries
- ★ Use appropriate technologies such as modeling, simulation, and distance learning to enhance engineering education learning experiences and investigations
- ★ Support of the NSTA Position Statement on the Next Generation Science Standards as they relate to engineering which states: "Science and engineering are integrated in the NGSS, from kindergarten through 12th grade. Integrating engineering and technology into science standards is not a new concept, but these important subjects have failed to receive the attention they need and deserve. Investigations in technology and engineering "provide opportunities for students to deepen their understanding of science by applying their developing scientific knowledge to the solution of practical problems" (see NGSS, Appendix A). The NGSS elevates the importance of engineering and technology by integrating them into the standards.

## AWARD SUBMISSION REQUIREMENTS

- ★ A narrative describing the applicant's service and leadership in engineering education program/practices, engineering implementation techniques, broader engineering science and technology community connections; and interdisciplinary, multicultural, and multi-perspective viewpoints to demonstrate how engineering transcends STEM, not to exceed 750 words.
- ★ A one-page description of how the applicant will use the funds for classroom materials and equipment, and the state of the applicant's current facility/equipment/materials.
- ★ A lesson (up to 5 pages) supporting the objectives described above, along with examples of student work representative of that lesson. Supplemental sample materials (up to 3 pages), documents, and/or photographs are encouraged (drawings, digital photographs, journal entries, etc.).
- ★ Three letters of support with at least one from an education colleague who can describe the merit of the applicant's work. Letters should not exceed two pages each. Letters of support shall accompany packet. Letters sent separately will not be considered.
- ★ Attach a resume or vita, not exceeding two pages, which includes a brief description of the applicant's teaching experience, education, and previous awards and recognition.
- ★ All correspondence must be in 12 point Times New Roman font, with a one-inch margin

## Prior to Uploading Application

Occasionally we receive entries that are incomplete or in which the applicant did not follow the specified guidelines. Entries that do not follow the stated rules for submission are disqualified, regardless of the merit or innovation of the entry. Make sure you and a colleague review the checklist below before sending in your application so you can ensure that your efforts will not be disqualified. Ensure that your application communicates the information you intend. Don't forget to check for correct spelling.

Please be advised that you may apply for more than one award; however, you are eligible to win only one NSTA award per year. Each application must be based on a unique program and process. Submission of the same idea and materials to different NSTA award programs will result in the disqualification of all applications. If your idea or project has received an NSTA award in the past, that idea or project is not eligible to receive an additional award.

If you are selected to receive an award, NSTA must request and receive your social security number to issue a 1099 form to you. If your program is currently grant funded, confirm that you, as an individual, are eligible to receive a cash award. If you have received an award for this project from another provider, you must notify NSTA.

Please note that, for security purposes, this online application form has a 2-hour time limit. If you are inactive for the maximum time, you will be automatically logged out of the system. You may log back in with your username (email address) and password. At any time during the application process, you may click the Save & Logout button, located at the top of every screen. This will save the information you have entered thus far and allow you to log back in to complete your form at a later date.

Upon receipt, all submissions become the property of NSTA. Applications will not be returned. Late or faxed applications will not be accepted. Completed applications must be received by December 21, 2022. Applications may only be submitted via the online submission form found at <https://www.nsta.org/awards>. Questions? Please feel free to e-mail [awards@nsta.org](mailto:awards@nsta.org).