

# Implement Engineering! Classroom Grants for Engineering Education



**Purpose:** The purpose of this grant program is to support teachers to implement high-quality engineering educational experiences into their classrooms.

**Funding:** Grants will support the purchase of classroom materials and/or teacher professional learning expenses. There are two possible grant amounts – \$500 or \$800 – depending on project type:

Amount	\$500	\$800
Project Type	<b>Single:</b> For a project that will impact a single teacher and her/his classroom(s).	<b>Team:</b> For a project that will impact two or more teachers and their classrooms. Teachers must be within the same school.

The Pre-College Engineering Education (PCEE) Division of the American Society for Engineering Education (ASEE) aims to award a total of five grants to support projects to be implemented during the 2021-2022 academic year. Funding will be provided by the PCEE Division. At least one grant will be awarded to support a project that serves pre-kindergarten, kindergarten or elementary students; and at least one grant will be awarded to support a project that serves middle or high school students. Grant checks will be written to the school so that funds may be used via the school’s procurement procedures. Checks will be processed during the beginning of the school year so as to be available to the school as soon as possible to cover costs.

The intent of the PCEE Division is to make this an annual grant program provided that funding is available within the division budget each year. Teachers may apply for the grant program more than once; however, priority will be given to those who have not received an award in the past. The grant guidelines and selection process may be modified by the PCEE Division through a process initiated by the Immediate Past Chair and approved by a majority of those on the PCEE Executive Committee.

### Timeline:

- Applications are due by July 31, 2022
- Awardees will be notified by August 10, 2022
- Projects must be implemented in the 2022-2023 academic year
- Evidence of project work (see p. 2) must be submitted to the PCEE Division Immediate Past Chair (Bradley Bowen, bowenb@vt.edu) by June 15, 2023

**Eligibility:** The applicant or applicants on a team must:

- Teach in a public, private, or charter school for the 2022-2023 academic year;
- Teach grade(s) pre-kindergarten, kindergarten, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, or 12; and
- Work or otherwise be affiliated with a member of the PCEE Division of ASEE. Affiliation includes having participated within a professional development workshop conducted by the PCEE member, working in partnership with the PCEE member on a curriculum writing or research project, or being a student of the PCEE member. Other affiliations may be considered as well. This PCEE member will be henceforth referred to as the “PCEE Division Advocate.”



**Pre-College Engineering Education**

*A Division of the American Society for Engineering Education*

**Required Application Materials:** All elements of the application will be submitted using the following Google Forms link: <https://forms.gle/B4eDEbM6zzhVnmHE8>. Sections of this application include:

1. School Information
2. Classroom Demographics
3. Applicant Information
4. Project Type and Applicants
5. Project Description and Purpose
6. Use of Funds
7. PCEE Division Advocate and Head of School Contact Information and Letters of Support:
  - a. From the PCEE Division Advocate (pdf to be uploaded to Google Forms) If needed, a template for this letter can be found [here](#).
  - b. From your Principal, Assistant Principal, Headmaster, or Headmistress (pdf to be uploaded to Google Forms) on school letterhead.
8. Awardee Agreements [i.e., to use money to support the project; to complete Reflective Project Summaries; and to share lessons, images/videos (w/o student faces), and parts of Reflective Project Summaries for use on the PCEE Division website].

**Review Process:** Applications will be reviewed by a subcommittee of PCEE Division elected leaders in July and early August. The subcommittee will use a rubric to guide the application review process.

**Paying Forward / Evidence of Project Work:** Just as we anticipate supporting your work with our funds, we anticipate your work products supporting others. Thus, we require Evidence of Project Work that the PCEE division will advertise and make publicly available in hopes of “paying forward” to other educators. Evidence of project work must include:

- 1) **A Reflective Project Summary:** This must be no longer than two pages, saved and submitted as a pdf document, and must include the following sections:
  - a) project summary detailing the major activities and purpose of the project;
  - b) number of students impacted by the project;
  - c) student learning outcomes;
  - d) a list of purchases made to support the project, including item descriptions and costs, AND (if applicable) plans for use of remaining funds;
  - e) aspects of professional growth for each applicant as a result of the project; and
  - f) plans for future implementation of this or future engineering projects in your classroom(s).
- 2) **Lesson Plans** developed or used to implement the project submitted in pdf form. Note: If there is a reason you cannot share a lesson plan (e.g., due to copyright), then explain that you cannot share a lesson and why in a section at the end of the Reflective Project Summary.
- 3) **Digital Images or Videos** that show students engaging with the project or that demonstrate learning outcomes. Note: If minors’ faces are shown in images or videos, you must have model release forms on file within your school/classroom that indicate that those minors have parental permission for their faces to be used in media, etc.



**Pre-College Engineering Education**

*A Division of the American Society for Engineering Education*