

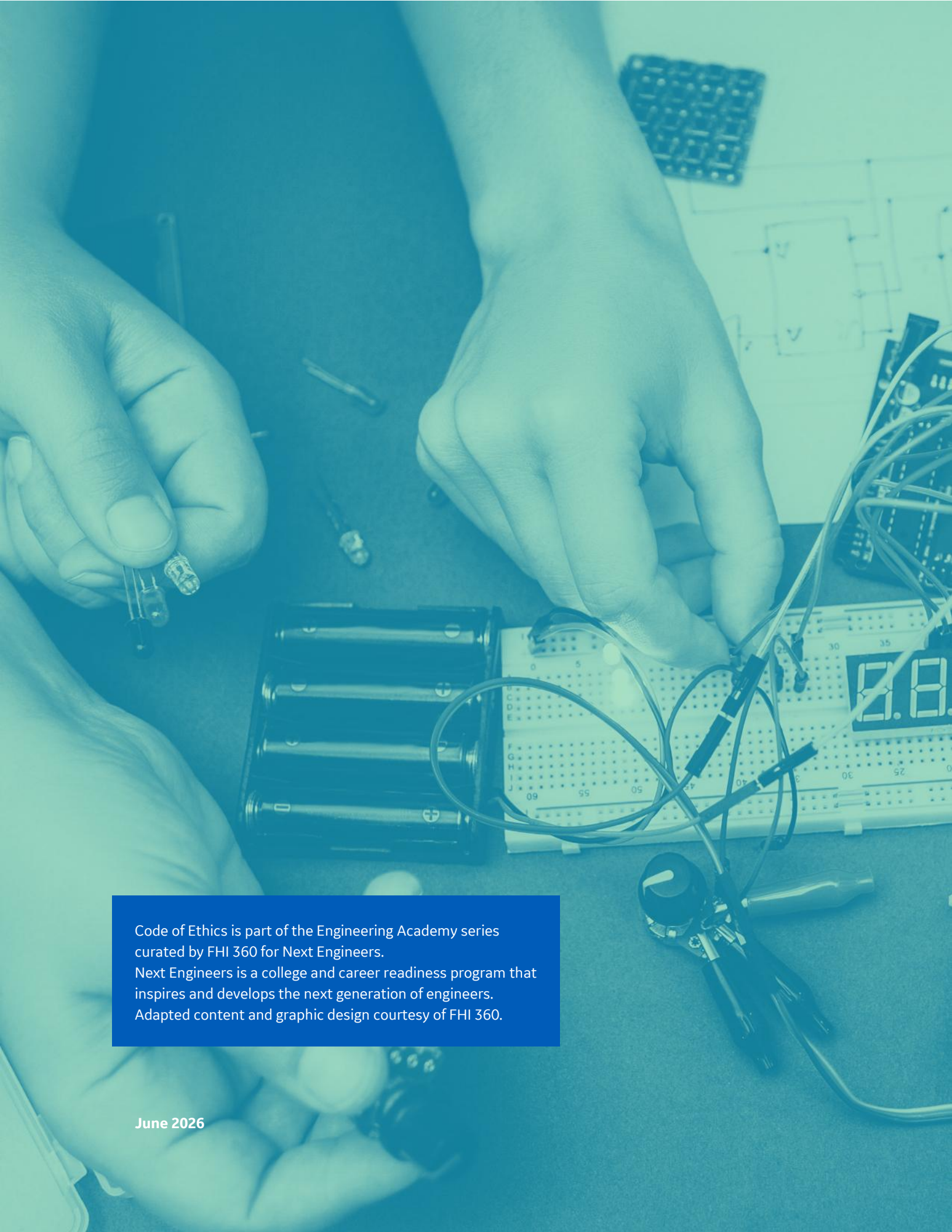
NEXT ENGINEERS



ENGINEERING ACADEMY
Code of Ethics



NEXT ENGINEERS



Code of Ethics is part of the Engineering Academy series curated by FHI 360 for Next Engineers. Next Engineers is a college and career readiness program that inspires and develops the next generation of engineers. Adapted content and graphic design courtesy of FHI 360.



Code of Ethics

Time	Ages	Cost	Group size
60 minutes	15 to 18	Low	Four groups; individual

Overview

Using the code of ethics from a professional engineering organization, students will discuss how these standards of behavior guide engineers and the work they produce. Students will then have the opportunity to create their own personal code of ethics.

Learning outcomes

As a result of this activity, students will be able to:

- Understand the purpose of a code of ethics.
- Analyze an organization's code of ethics and understand how it applies to the work of engineers.
- Develop a personal code of ethics that aligns with their values.

Materials

- Laptop or computer with Internet access and projector
- PowerPoint Presentation: Code of Ethics
- Student Handout: Code of Ethics, *1 per student*
- Large poster paper, *1 per group*
- Laptop or computer with Internet access, *1 per group*

Preparation

1. Print copies of the student worksheet for each student or share a digital version.
 2. Preview resources to ensure they are appropriate for your students. You may use the code of ethics provided in this activity or use the code of ethics from a local engineering organization.
- **Engineering Ethics: Crash Course Engineering #27**
<https://www.wfeo.org/code-of-ethics/>
 - **World Federation of Engineering Organizations – The Code of Ethics**
<https://www.wfeo.org/code-of-ethics/>

EMPLOYABILITY SKILLS

These are the sets of skills necessary for students to succeed in postsecondary education and work settings as determined by universities and employers.

The employability skills addressed by this activity:

- Communication skills
- Thinking skills
- People skills



What to do

Introduction (15 minutes)

- **Slides 1-2:** Welcome students and ask the group if anyone can define the word 'ethics'. Students may provide examples of ethics (i.e., "You should always help people in trouble") but challenge them to provide a definition. Call on a few volunteers and use some of the questions below to encourage the group to think deeper:
 - Who decides what behavior is ethical?
 - What is the difference between ethics and laws?
- **Slides 3-4:** After receiving a few responses, share the definition of "ethics". Next, share the definition of "code of ethics":
- **Slide 5:** Show the video [Engineering Ethics: Crash Course Engineering #27](#). Stop the video at the 5:00 mark and review the key concepts covered:
 - A code of ethics provides a common guideline for all engineers to follow to ensure that engineers act responsibly.
 - Engineers can use a code of ethics to review their work and ensure that the things they build or create are safe and beneficial to the community.
- Explain to students that they will now be organized into groups to analyze an engineering code of ethics.

Rewrite the Code (30 minutes)

- **Slides 6-11:** Read the code of ethics from the World Federation of Engineering Organizations (WFEO). The students will be working together to analyze and update the language of the code.
- Split the students into four groups and provide each group with a large sheet of poster paper and each student with a copy of the Student Handout: Code of Ethics. Assign each group a section of the code.
- **Slide 12:** Each group will be tasked with rewriting their section of the code, using easy-to-understand language. They will then present the updated code to the rest of the class.
 - Groups should read the three points under their section and use an online dictionary to look up any words that are unfamiliar. Use the questions on the student handout to discuss the meaning and impact of the code.
 - Next, the groups should rewrite each sentence using clear, straightforward language. It should be written in a way that other young engineers would be able to understand.
 - Finally, each group will write out their new code of ethics section on the poster paper to present to the entire class.
- Allow about 20 minutes for the groups to review and rewrite their sections, and about 10 minutes for presentations.
- **Slide 13:** End this portion of the activity with the following question: Why is it important for organizations to have a code of ethics that people can easily understand? Take a few responses from the group and let students know that these guidelines are most effective when people can understand them and know how to use them in their work



KEY VOCABULARY

Ethics: A set of moral principles guiding the conduct of an individual or group.

Code of Ethics: A set of guidelines adopted by an organization to help members understand what is right and wrong, and to make decisions based on those guidelines.



Personal Code of Ethics (15 minutes)

- **Slide 14:** To close out the activity, students will spend some time creating their own personal code of ethics. This part of the activity should be done individually and can be entered in the student's reflection journals.
- Review the step-by-step instructions while students follow along on the handout to develop their own code.
- **Slide 15:** Share the sample code of ethics statements so that students have an idea of what a finished code may look like.
 - Encourage students to use their own words and write statements that would be motivating to them.
 - They should write at least four statements.

Closing

- Students may not finish writing their personal code of ethics during the session and should continue to update it in the future. Encourage students to keep a copy of their code in an accessible place (such as a picture in their phone) so that they can return to it whenever they need a reminder about how to work with others and make the right choices.
- **Slide 16:** Answer any questions students may have as time permits.

References

1. CrashCourse, "Engineering Ethics: Crash Course Engineering #27", filmed December 6, 2018, YouTube Video, 9:50, <https://youtu.be/5KZx81crb48>.
2. How To Create Your Own Code of Ethics (With Examples), Indeed Editorial Team, <https://www.indeed.com/career-advice/career-development/create-code-of-ethics>.
3. The Code of Ethics, World Federation of Engineering Organizations, <https://www.wfeo.org/code-of-ethics/>.

