

MATERIALS ENGINEERING CAMP

ATTENTION: High School Students



Are you interested in science and engineering?



Who Can Attend?

- Students entering their Junior or Senior year of High School, in Fall 2021.
- Highly motivated, inquisitive learners, with math and science aptitude.
- Students involved in math, science, and industrial technology classes.

What Is It?

- Multi-day summer camp utilizing fun hands-on learning experiences involving math, physics, and chemistry.
- Hands on metallurgical experiences through foundry and blacksmith learning.
- A unique team-based, intensive problem solving, science experience, under the direction of a distinguished "Materials Mentor" professionals.
- Combination of minidemonstrations, field trips, and laboratory activities to actively explore materials science & engineering principles.

Where & When Is It?

- July 25 28, 2022 (4 Days)
- 8:00 am 4:00 pm
- Targeting for in-person but virtual option will be offered.

Cost of Camp?

- 30 full scholarships will be provided to selected participants.
- All selected students receive FREE tuition, meals, knowledge, and fun activities.



How to Apply?

- Applications are due May 20th, 2022
- Applicants will be notified by May 27 on decision.
- 1. The application form is available online at

https:// forms.gle/913ogN4oaVofA7Me8

2. Submit current high school transcript (unofficial is allowed) to Ali Scheer, email preferred:

Email: Scheer ali M@cat.com

Mail: Ali Scheer

Caterpillar (16) Bldg. CV-4161 901 West Washington Street East Peoria, IL 61630

Phone: (309) 494-3806

Frequently Asked Questions

What is Materials Engineering Camp?

- A multi-day summer camp geared toward high school juniors and seniors exploring the exciting field of Material Science and Engineering.
- A day camp (non-residential), starting at 8:00 am and running until 4:00 pm tentatively.

How are students selected?

- Students must have a basic knowledge of algebra, chemistry, and physics and describe why they want to learn more about engineering and materials science as a possible college major/career.
- Experienced, practicing engineers review each application to select the "best and brightest," highly motivated students, who have an interest in engineering.
- Prior participation in science fairs or similar science-oriented activities is helpful but not required.

What do students learn at Materials Camp?

Students have the opportunity to gain hands-on experience with materials processing and solve materials problems in a fun, interactive environment with their peers. During the week, students will have the opportunities to interact with adults employed in the industry and use a variety of processing and analysis techniques employed by practicing engineers every day. At the end of the Materials Camp, the students will walk out with a greater understanding of materials and materials engineering, as well as experience solving real-life materials problems in a stress-free learning environment.

What types of people work in this field?

Materials engineering professionals are typically college graduates who studied engineering with an emphasis on metals, ceramics, or polymers.

What is ASM International?

It has a global professional membership of 40,000 professionals working in the field of Materials Science and Engineering. ASM Materials Education Foundation is a non-profit organization devoted to helping excited young people worldwide to explore the field of Materials Science and Engineering. Programs include: Educational and career services, "Materials Camps," scholarships, leadership training, and providing information that promotes careers in the field.

Who pays for Materials Camp?

The ASM Materials Education Foundation, the Peoria Chapter of ASM, and local industries provide funds for all camp expenses, including food, tuition and tours. Camp mentors are volunteers, who often take personal vacation time to enable their participation.