



MATERIALS ENGINEERING CAMP

July 15-18, 2024

Peoria, Illinois

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 2024.
- 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 mini-demonstrations, field trips, and laboratory activities to actively explore materials science & engineering principles.

Where & When Is It?

- **July 15-18, 2024 (4 Days)**
 - 8 am - 4 pm
- **Where: Caterpillar Tech Center**
- **In-person attendance**

Cost of Camp?

- All selected students receive **FREE** tuition, meals, knowledge, and fun



How to Apply?

- **Registration opens Jan 8, 2024**
- **Registration due April 26, 2024**
- Applicants will be notified on their acceptance within a month from receiving the application and all required documents.
- **Apply early as spots are limited**

The application form will be available online at

<https://forms.gle/xXBaoPduAFBLbDed6>

2. Submit current high school transcript (unofficial is allowed) via email to:
Rowan_Olga@cat.com,
Hazel.Ambort@cat.com

Any questions, please contact Olga Rowan and Hazel Ambort.



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 work materials engineers do?

Materials engineering professionals are typically college graduates who studied engineering with an emphasis on metals, ceramics, polymers, semiconductors, etc.. They work on developing new and/or improved materials and processes used to create a range of products, from computer chips and aircraft wings to construction equipment and biomedical devices. Their daily responsibilities may include, but not limited to: manufacturing, research, chemical engineering, failure analysis, biomaterials and biotechnology, sustainability, materials testing and validation.

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.