### **Bee a ChemE Overview**

Introducing Bee a ChemE, a national awareness campaign from AIChE designed to ignite the imaginations of middle schoolers by introducing them to the wonders and possibilities of a career in chemical engineering. Supported by individual donors and corporate sponsors, we are addressing the STEM skills gap and shaping the future of innovation.



# What is Chemical Engineering?

For over a century, chemical engineers (aka a ChemE) have been improving the world. From the development of smaller, faster computer chips to innovations in recycling, treating disease, cleaning water, and generating energy, their work touches every aspect of our lives.

Today, these science and engineering problem solvers are at the forefront of breakthroughs in medicine, biotechnology, microelectronics, advanced materials, energy, consumer products, manufacturing, and environmental solutions. They're also leading the way with many starting their own innovative companies.

Thanks to our partners for their support in inspiring the next generation to engineer the future and explore the possibilities of a career in chemical engineering.

#### **Corporate Sponsors**







Ex∕onMobil





#### **Individual Donors**

Dan & Ellen Coombs

Nance Dicciani



Get involved — It's unBEElievable the support we've received so far:

Visit aiche.org/BeeAChemE to learn more, become an ambassador, donate, sponsor the program, download resources, or ask us a question.



## Inspiring the Next Generation to Engineer the Future

#### **What to Study**



**Math:** Transition to pre-algebra and introductory algebra, learning basic equations, variables, and problemsolving strategies.



**Science:** Deepen understanding of physical and life sciences, covering topics like atoms, molecules, chemical reactions, cell biology, and basic physics principles.



**Technology:** Explore introductory coding concepts and age-appropriate software (e.g., Scratch, Python) to understand computational thinking.

#### **Activities**



Join a school science club or team and participate in science fairs.



Take part in STEM challenges, competitions, or after-school programs focused on problem-solving.



Develop coding and programming skills by working on projects.



Seek opportunities to meet professionals in science and technology fields.



Explore STEM modules on AIChE's K-12 page.

aiche.org/beeacheme

#### **ChemE Fields, Jobs and Average Salary**

There are numerous exciting jobs open to chemical engineers in almost any field that interests you. The median annual wage for chemical engineers was \$106,260 in May 2022.

Popular fields include:

- Data & Al Engineering
- Process Engineering
- Environmental Engineering
- Product Development Engineering
- Food Process Engineering
- Biopharmaceutical Engineering



### **Biomedical Pioneer**

### **Albert Keung**

Hometown: Cary, North Carolina

**Education:** Stanford University

Major: Chemical Engineering

Occupation: Entrepreneur; Associate Professor,
North Carolina State University

Get the buzz on some of

our ChemEs...

#### **Intergalactic Adventurer**

#### **Joan Melendez Misner**

Hometown: Orlando, Florida

**Education:** University at Maryland, Towson University

Major: Chemical Engineering & Chemistry

Occupation: Aerospace Integration Engineer, NASA



This program offers K-12 students a personal perspective on chemical engineering by bringing undergraduate ambassadors from AIChE Student Chapters into the classroom, particularly in traditionally underserved communities. Ambassadors share their experiences and knowledge, inspiring students to explore STEM fields and chemical engineering.